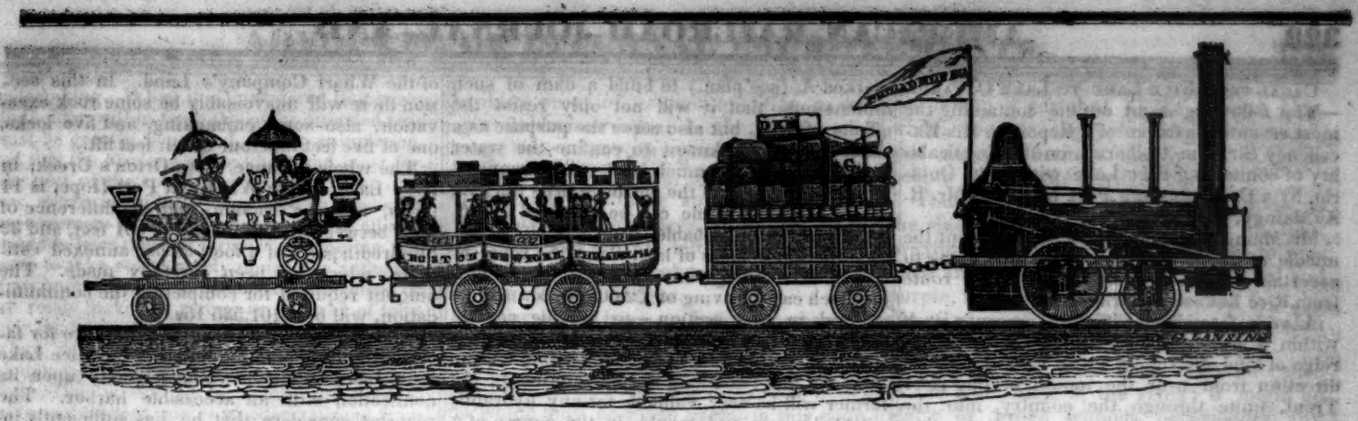

AMERICAN RAILROAD JOURNAL,
AND ADVOCATE OF INTERNAL IMPROVEMENTS.

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AMERICAN RAILROAD JOURNAL, &c.

NEW-YORK, MAY 31, 1834.

Railroad Map.—We have again to ask the indulgence of those who have subscribed for the Railroad Map. We were obliged, even after it was nearly ready, to have it *re-engraved*, which of course has very much retarded its appearance. It will, however, be far more complete than at first contemplated, as there will accompany it a concise description of the most important railroads and canals, compiled from the best sources within our reach, which will render it far more useful to those who desire to see at a glance the numerous works of the kind now constructed, constructing, and in contemplation.

It will be forwarded as soon as completed to those who have ordered it. It is desired that those who wish it, but have not ordered it, will let us know at an early period, that all those for a distance may be forwarded at the same time.

It comprises all that section of the U. States and Canada in which there are any works of internal improvement. And in order that the account to accompany the map may be as complete as possible, we desire that a short statement may be forwarded to us at the *earliest possible period*, by the engineer, president, or agent of each company now constructing, or preparing to construct, any work of the kind within the limits of our map. It will cause them very little labor, yet confer upon us a great favor; and we in our turn will endeavor to reciprocate their kindness.

We also ask for a statement of the present condition of, and amount of business done on, those works which are now in use, excepting the South Carolina Road, the Chesapeake and Ohio Canal—statements relative to which we have already received.

Boston and Providence Railroad.—We have been favored with a copy of the charter granted by the Rhode Island Legislature, at their late Session, for the continuance of this Road from its termination at the Massachusetts' Line to tide water in Providence. The company, although for a time kept in suspense, have, as will be seen by the following extract from the charter, very little cause to complain. The charter is a very liberal one.

"And the said Corporation are hereby authorized and empowered to locate, construct and finally complete a Railroad in such manner and form as they shall deem most expedient, commencing at the dividing line between this State and the State of Massachusetts, and at that point which shall intersect and connect with the railroad now being constructed by the Boston and Providence Railroad Corporation, from the city of Boston in said State of Massachusetts, towards the State of Rhode Island; and from this dividing line as aforesaid passing into the State of Rhode Island to tide water in the city of Providence, in such place or places as may be deemed most convenient for said company, and with such lateral branches of said road to any part of the waters of Narragansett Bay, or to any villages or factories as the said company shall deem expedient, provided the same do not interfere with the privileges heretofore granted to any other railroad company."

Twelve miles of the road commencing at Boston are completed, and will be opened for use on Tuesday next, the 3d of June. For the purpose of witnessing this event the directors will assemble in Providence, and on Monday pass along the line towards Boston, with such gentlemen as desire to examine the route, and witness its state of forwardness; and on Tuesday they purpose an excursion in their passenger cars, with a locomotive engine, on that part of the road which is completed.

The *Agent and Engineer* will please accept our thanks for his polite invitation to be one of the party. It would afford us great pleasure, but other engagements will probably prevent.

The railroad between Buffalo and Black Rock, in the State of New-York, has been finished in part, and the cars have commenced running on the Buffalo end of the route. At the Black Rock end, a line of stages conveys passengers to the Falls.

Internal Improvements in Canada.—We publish to-day an account of two contemplated works of improvement in Canada, which, when completed, will afford great facilities to the inhabitants of the upper province. The first is for a canal from Port Hope, on Lake Ontario, to Rice Lake, and probably to Lake Simcoe, from which there is a water communication with George's Bay and Lake Huron. The other, a railroad from Ancaster, at the extreme west end of Lake Ontario, to the town of London, on the river Thames, and probably to Lake Huron. These are works of great importance to Canada. It will be seen, by a glance at the map, that these works, if completed, taken in conjunction with the improvement of the St. Lawrence, now in contemplation for steamboat and sloop navigation, will divert much of the business now done upon the Erie Canal—and that they will be completed, we have little doubt.

What, then, ought New-York to do to retain her share of the business? She *ought*, and *must*, construct a sloop and steamboat canal from Oswego to the Hudson. That, and only that, will secure her just proportion of the business.

Augusta and Athens (Ga.) Railroad.—The continuation of the South Carolina Railroad to Athens, (Ga.), or rather the construction of the Augusta and Athens Railroad, which, we hope, will soon be commenced, will constitute another very important link in the great line to the Mississippi River, for short of that point it certainly will not be terminated.

Posts.—The Maine Farmer states that Mr. North, of Augusta, several years ago, set two posts near the river. One was butt-end up, the other butt-end down. Both were equally sound when put into the ground, and now the one with butt-end up is sound and good, while the other is decayed.

CANAL FROM RICE LAKE TO LAKE ONTARIO.—The following is an outline containing the most essential features of a Report to His Excellency Sir John Colborne, on the practicability of connecting Rice Lake with Lake Ontario, by a Canal through Port Hope, by Mr. R. A. Maingy, Civil Engineer.

Mr. Maingy commenced his survey about the middle of December last. The object was to ascertain the cheapest and most direct route from Rice Lake to Ontario.

A very formidable difficulty presents itself within a few yards of Rice Lake, in a high ridge of land stretching in an East and West direction from near the mouth of the river Trent, quite through the country, into the State of Ohio, rising from a few yards to many hundred feet above the level of the waters in Rice Lake. It being necessary to procure a sufficient supply of water from the Lake to feed the Canal for the first three miles—this barrier appeared at first sight as an insurmountable obstacle to the undertaking; but, by persevering in his researches, discovered a natural passage or ravine through it, well calculated to assist in passing through this formidable ridge; although its adoption will occasion the route of Canal to be more circuitous than could be wished, from its being necessary to follow the ravines the whole distance to Port Hope—still it is the only chance there is of bringing the waters of Rice Lake down to Port Hope.

Mr. Maingy's attention was next directed to the choice of a place at which the Canal should commence at the Rice Lake, and Orton's Creek has been determined on, on account of an excellent harbor and many other advantages.

The proposed dimensions of the Canal are twenty-two feet broad at bottom, with a slope of one foot and a half horizontal to a foot perpendicular, and four feet depth of water, with locks seventy feet long, by fourteen feet broad, and in general ten feet lift. It is also proposed, in consequence of the very great distance from the intended line of Canal, at which proper building stone can be procured, that the locks should be built of wood, which, if properly constructed at first, will, with occasional repairs, last from fifteen to twenty years, and be equally as useful as those of stone, the interest on the difference of expense between them will more than repay the cost of maintaining them in repairs, and should it ever be contemplated to increase the dimensions of the Canal, those built of wood can be readily removed.

The route of Canal follows the natural passage before mentioned, in a southerly direction; after crossing the Cobourg Road, the land rises very rapidly until it arrives at the summit of the ridge, distant from the Lake one mile and a quarter, and 63 feet and 15th-hundred part of a foot above its level; on the north and south sides of which summit, (at a few yards asunder,) two springs take their rise, one sending its overplus water into Rice Lake, through Orton's Creek, the other running south from the head of Howe's Creek, and discharges itself into Lake Ontario. Both are, however, very insignificant; from this point the route continues in nearly a straight direction, until it crosses the Cavan Road, at the corner of Howe's Inn, and enters a ravine running in a due west direction to Moon's clearing, the termination of the first section, and three miles distant from the place of starting—the fall of the land from the summit is very rapid until at Moon's, where the route is once more level with the waters of the Lake. The expense of this section will be very great, in consequence of the great depth of cutting, no less than £63,495 14, as per annexed estimate. A guard gate at the head of the lake will be required to protect the Canal against spring and fall floods, that otherwise would have a tendency to obstruct the navigation, as also to shut out the supply of water in case of any accident occurring along the line of Canal. The next section continues in the same direction for a mile, and then turns to the south. The land being considerably below level, and being well adapted for damming, it is proposed, at the point marked A, (see plan,) to build a dam of such dimensions, that it will not only resist the effects of frost, but also serve the purpose as a road. An embankment to confine the water from drowning too much land will be required on the north side of the ravine, unless the land which is of no value can be procured in gift, (which is not improbable, from the anxiety of the different holders of land along the route of Canal, to see it go into immediate operation,) in which case a saving of £2,005 0s. 6d. may be effected in this section,—to provide against floods, as also to carry off the overplus water, it will be requisite to construct a waste wier in the dam, and two along the embankment; the former will be very valuable for any hydraulic establishment, and would, in the course of a few years, more than pay the expense of erecting the dam, &c., as also keeping it in repair. In the next section, running in a southerly direction through Mr. Trotter's land, being much above the level, there will be some extra excavating, and, as per annexed estimate, the amount required to complete it will be £4,758 7s. 4d. The section commencing near Mr. Riddle's land, follows the same direction as the last, to its termination in the centre of Mr. Seaton's clearing—in this mile nine locks, of ten feet lift each, will be necessary. Smith's stream is frequently crossed in this and the two following sections, but no culverts will be required, as its course can readily be changed, until such time as the work be completed, when it is intended to admit it into the Canal,—the cost of this section, as per detailed estimate, will be £4,533 6s. The next mile, which is somewhat winding, commencing in the 9th lot of the 6th concession, follows the before mentioned creek in the 7th lot, then turns back with a gradual bend into the 10th lot, back again into the 8th lot of the 5th concession, and terminates at Messrs. Boen and Coy's mill pond. In this section 6 locks, of 10 feet lift each, will be necessary—cost of this mile £3,306 19s.

The 8th section, terminating at said mill dam, will cost but little, it being intended to make use of the pond, as being a canal already formed: by raising the present mill dam from 5 to 15 feet, it will drown the ravine as far back as Fye's clearing, the termination of the last section, and afford more than sufficient depth of water for the navigation, at the small cost of £370, and at the same time serve as a reservoir for supplying the locks, and by raising the water on a level with a small ravine, through which it is intended to leave the pond; much extra cutting will be saved in the next section which, commencing at this point, continues in a south-east direction through the lands of Messrs. Jamieson and Quay, and by six locks, (one of five feet, and five of ten feet lift,) descends into Bedford's Creek, which turns its direction to the south. The cost of completing this mile, (in which there is some extra cutting in passing from the mill to the creek,) as per annexed estimate, will be £5,284 3s. 6d. The 10th section continues still to following the course of the same creek, which is admirably adapted for damming, (its banks being very steep, and not more than eighty feet asunder,) were it not for the rapid fall of the land, which will require four locks of ten feet lift each, and cost, agreeably to the annexed estimate, £2,527 17s. From this last section, following the same creek to the termination of the 11th section, at John Brown, Esq.'s mill pond, two locks, of ten feet lift each, will be necessary, and the cost of completing it will be £1,754 3s. 6d. 12th and 13th sections, commencing at the mill pond, which it is intended, by the formation of a tow-path along its bank, and clearing it of its stumps, &c., to use, as part of the Canal, terminates in John D. Smith's property, near the stone quarry. One lock, of ten feet lift, will be required to descend into, and two locks, (one of five and one of ten feet lift,) to descend out of the pond. The expense of this section will be £2,012 15s. 6d. The 14th and last section runs on the east side of Smith's Creek, and passing in front of the post office, terminates at the boundary line of the Wharf Company's Land. In this section there will unavoidably be some rock excavation, also some embanking, and five locks, one of five feet and four of ten feet lift.

The whole distance, from Orton's Creek, in Rice Lake, to the Wharf, at Port Hope, is 14 miles, within a fraction, and the difference of level between the two lakes is 361 feet, and 32 hundredth parts of a foot, as per annexed estimate, which has been carefully made. The amount required for completing the communication, will be £101,535 15s. 6d.

The ultimate success of any measure for facilitating the communication of the Rice Lake with Lake Ontario, depends wholly upon its connection with an accessible harbor. The reporter considers that he has sufficiently informed himself of the localities of the shores of Lake Ontario, to be able to say with confidence that Port Hope, from its position, is not only the natural, but the most accessible, point of communication to the chain of navigable lakes by which this section of country is every where intersected. Its natural disadvantages are very few, and capable of being greatly improved; the harbor, when completed, (which it will be this summer,) will be one of the safest and most convenient ones between this and Quebec, and capable of sheltering any number of ships that are likely at any time to be found on these waters.

As no natural intercourse, however perfect, if comparatively distant and prolonged, can be of much benefit to the district from whence it proceeds, so neither will a communication, however short, be of much utility, if it does not possess a proper outlet for the produce of the country at some convenient harbor.

That the position of Port Hope is particularly favorable for the termination of such a work, must appear evident to every partial observer; it is not only the shortest possible distance from Lake Ontario to Rice Lake, possessing a safe and commodious harbor, but its eminences present every facility for defence in case of war; and the communication from Lake Ontario to Rice Lake up to Lake Simcoe, can by this route be completed for a sum not greater than is necessary merely to open the navigation from the mouth of the Trent to Rice Lake. These are facts that cannot be refuted, and which the reporter sincerely hopes will induce its being adopted and undertaken by the province in lieu of the round-about and expensive route by the Trent.

An estimate follows the report, which it is not necessary we should particularize; it is sufficient to say that it amounts to £101,426 6s. 6d. currency.

LONDON AND ONTARIO RAILROAD.—We perceive, by the True Patriot, that the first meeting of the friends of the London and Gore Railroad was held in London on the 7th ult and we rejoice to find that stock to the amount of 400 or 500 shares was taken up before the meeting adjourned. A committee to select subscriptions along the line of the contemplated road was appointed, and stock books placed in their hands, or transmitted by mail to such gentlemen of the committee as were not at the meeting. The Act requires that stock to the amount of £25,000 be taken up, before the company can be completely organized; and it appears by a letter received this day, by E. A. Talbot, Esq., from the Secretary of the Committee at London, that there is no doubt of that sum being subscribed by persons possessing property on the line of the intended road. We have heretofore avoided making any allusion to the act of Incorporation of the London and Gore Company, solely because we felt apprehensive that the undertaking of such magnitude was beyond the means of the persons most interested in carrying it into effect; and friendly as we have ever been to public improvement, and highly appreciating the zeal of the gentleman to whose management the procuring of the charter was committed, we were unwilling to throw any obstacle in his success in so important an

undertaking. When it is considered that every landholder within ten miles of the intended road must be greatly benefitted by its completion, and that the produce of the finest and most fertile part of the country of America must, in a few years, be of little value unless some such improvement is effected, we are not at all surprised to hear that the farmers are coming forward to take stock, solely under the influence of an impression that, should the business on the roads make no return in the way of tolls, their lands would increase in value to such an extent as fully to justify the investment of whatever capital they may possess. The sum of £100,000 is said to be amply sufficient to make an excellent iron or wooden railroad from London to Hamilton, or Dundas, and if any farmer whose land would be increased in value 50 per cent. by the completion of so magnificent an undertaking, was to take up two shares, which for the most would only subject him for two years to a quarterly payment of £3 2s. 6d. it would be unnecessary to open a stock beyond the line of the intended road. Should the Company succeed, (as we hope sincerely they will,) in making the road from the head of the Lake to London, there can be no doubt of its being continued to the navigable waters of the Thames, or of its being one of the most profitable investments of capital in this country. A single glance of Samuel Taylor's new map, on which the intended line of the road is marked, and the extensive region bordering on Canada, west of the St. Clair, will be sufficient to show that in the event of its continuance either to the navigable waters of the Thames, or to the south-western extremity of Lake Huron, the Company must derive all the benefit of the extensive carrying trade and travel now going on between the eastern and western States of the Union.—[Toronto Courier.]

Wedge Wheels—Indian Arts and Manufactures. By JOHN ROBISON. [From the London Mechanics' Magazine.]

SIR,—In the Mechanics' Magazine for April there is an article entitled "Hancock's Wedge Wheels," in which, although no direct claim of novelty of invention is made by your correspondent, most readers will be led to infer that the construction of the wheel is new, and the invention of Mr. Hancock. I beg, therefore, to state that as far back as the year 1811, I had wheels with the spokes and naves of the same identical construction, made at Hyderabad, for some artillery carriages. I had a pair made at the same time for a curricle, in which the nave was fixed on the axle by double nuts and an oil-tight cup, like Collinge's patent. In the putting together of these wheels, I used a precaution which appears to have escaped your correspondent. I made the butts of the spokes a little too full to admit of their touching the metal box, leaving a vacuity or near an eighth of an inch between them; a corresponding opening was left at the joints of the felloes, and the consequence was that on the tire hoop being put on, its contraction forced the spokes home to the box, and wedged them so hard together at the shoulder, that, even in the hot climate of India, I never observed a spoke become loose by shrinking; it need hardly be said, that the bolt-holes in the butts of the spokes require to be made of an oval form, to admit of the contraction taking place without bending the bolts. My naves were of gun-metal, and I found it better to have the holes of the inner flanch tapped, than to have nuts on the bolts.

A construction very analogous to this has long been in use in the Madras Artillery, in which service I have always understood that it gave every satisfaction. I once witnessed a striking proof of its good qualities, in seeing a field-piece upset in the course of a charge over some rocky ground, and dragged some yards on its back, until it again righted, without any thing appearing to have given way; in such cases, when the wheel fails, the butts are all left firmly seated in their place, and the spokes break off near to the edges of the flanges.

I observe you have an Indian correspondent, who occasionally gives you descriptions of tools and practices in use among the native workmen. He has omitted to notice one which may be made useful in this country: the saw of an Indian workman always cuts in the pull, and not in the push; by this means a thin bladed saw may be made to do the work of a strong one, as no application of strength in pulling will cause it to buckle. If small saws, such as key-hole saws, were formed to cut by the pull, they would not be so liable to break as they are at present; and if saws for pruning fruit trees were so made, they might be fixed to the ends of long poles and worked from the ground, without requiring the use of a ladder. The common hand-saw in India is from 14 to 18 inches long, with a handle like that of a duelling pistol.

If you have the means of communicating with your Bombay correspondent, you should ask him to get you an account of the processes followed by the lapidaries of the north-west of India, where they make cups and other things of agates, at so cheap a rate, and yet so much cut, that they must have some expeditious methods which may be useful here if known.

I am, sir, your very obedient servant,

JOHN ROBISON.

9 Atholl Crescent, Edinburgh, March 14, 1834.

On the Color of the Air and of Deep Waters, and on some other Analogous Fugitive Colors. By COUNT XAVIER DE MAISTRE. Translated from the Bib. Univ. by Prof. J. Griscom. [From the American Journal of Science and Arts.]

(Continued from page 308.)

Having considered the opaline property of air and water, let us now examine the production of opaline blue in opake bodies.

The cause of the blue tint assumed by the fine skin which covers the veins has hitherto been a doubtful question. This phenomenon, which is uniformly connected with the opaline property of the skin, is mentioned by Leonard De Vinci; let us first see the conditions under which it exists.

First, the vein must be deep enough to absorb all the light transmitted by the skin; and the skin must have the thinness requisite to transmit a great portion of the light. If the vein is thin, it reflects the color of the blood and becomes red;* this color, mixing with the opaline blue of the skin, forms those violaceous tints observable on the countenances of persons of dark complexion (brouille). If the vein is still thinner and nearer the epidermis, the transparency of the skin increases and the red color is more distinct; finally, a tissue of imperceptible veins, very near the surface of the skin, colors the cheeks and lips of young people of a fine complexion, with a uniform red; but we may observe that these beautiful colors have not the exact tint of the blood which produces them; it partakes of the opaline blue, which renders the color slightly carmine, and tinges sometimes the lips of sanguine people of a purple or violet hue.

Thus, the difference which may exist in the size of the blood vessels, and in their proximity to the surface, is sufficient to produce all the shades of blue, violet, red and purple, which are seen in the human face, by the mixture of the opaline blue of the skin with the red of the blood.

The red color of the blood is not the cause of the blue tinge of the veins; it might be black or green without occasioning any change; it is enough that the coloring principle absorbs all the light transmitted by the skin. This result may be artificially produced by a very thin plate of ivory, which has nearly the same effect as the skin. If a few drops of ivory black, prussian blue, cochineal, or bile, sufficiently dense to be opake, be placed on one of its surfaces, they produce alike a blue tint on the opposite surface, because they equally absorb all the light transmitted by the ivory. But if, instead of a coloring matter which absorbs light, we use an opake reflecting coloring substance, we have a tint compounded of opaline blue and that of the color employed.

The red oxide of lead placed on the ivory gives on the opposite surface a slight tinge of carmine. Some painters avail themselves of this property of ivory, in sketching the cheeks and lips of their portraits, by placing a coat of minium on the opposite surface, and thus obtain indirectly the effect of a slight use of carmine.

But if, instead of minium, Naples yellow be put on, there is on the opposite surface a green spot. In both these cases, then, the opaline blue is mingled with the proper tint of the opake reflecting color, while the blue alone appears when the applied color absorbs the light transmitted by the ivory.

The mixing of colors in oil painting furnishes still more evidently an opaline blue. The most common case is the mixture of white with vegetable black, which produces a bluish shade. Various writers have adverted to this, and as indigo and prussian blue, in mass, approximate to black, it was thought in former days that blue was a mixture of light and shade; but the blue produced on this occasion belongs exclusively to white and not to black, as is proved by the following process: two plates are painted of a grey color, one by a mixture of ceruse and charcoal ground in oil, the other by superadding to a coat of white a glazing of charcoal, so that they may both have the same depth of shade; the first will be bluish, the second grey, without a mixture of blue.

As transparent colors in oil lose almost wholly the color which they have in a pulverulent state, and thus in mass approach to black, the mixture of them with white produces also opaline blue, which modifies the natural shade of the color.

Every painter knows the striking difference there is between the color of a mixture of cochineal lacker with white, and that which the same lacker produces as a thin coating upon a white ground; the first is of a violet color, and the second has all the purity and splendor which is characteristic of this fine color. Thus artists, who wish to obtain the beautiful red of cochineal or madder in their draperies, always employ these lackers in mixture (en glacis). Opake reflecting colors, such as Naples yellow, chromate

* It is thus that a wide barometer tube, filled with colored wine, appears black, while a thin thermometer tube, under like circumstances, is of a beautiful purple.

of lead, yellow ochre, produco, as well as white lead, opaline blue, by a mixture with black, and the effect is still more sensible. These compounds, according to theory, ought to give only shades of yellow; and yet their tints are decidedly green, so that they are often used for painting the deepest verdure of landscapes. In these cases it is the opake reflecting color which is opaline.

I have stated the most remarkable instances of the singular property which certain colors possess of producing opaline blue by mixture, but there is an infinite number of other modifications less apparent, resulting from mixtures of compound colors, which it would be impossible to describe, but which may always be pre-ascertained by the following rule: *When white lead or opake reflecting colors are mixed with black, or with transparent colors, there is a production of blue, and a consequent modification of the primitive shade of the coloring matter.*

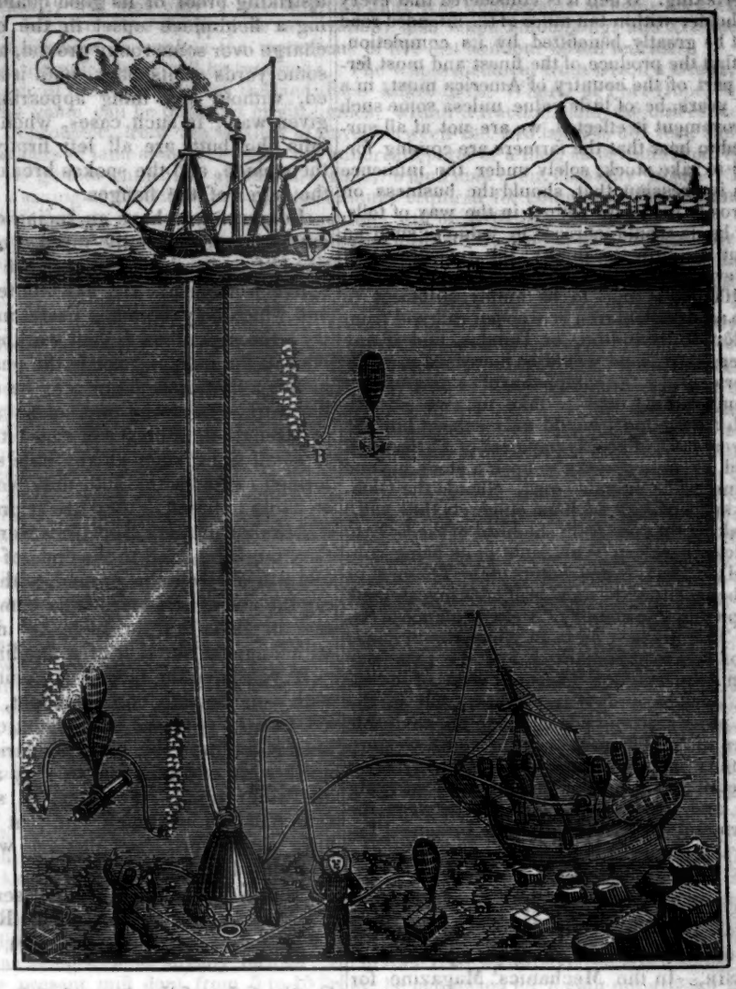
These modifications are often very slight, but they do not escape attentive observers. In the preceding observations I have described effects, well known, it is true, but which appear to have no analogy to each other, and which appear to me to depend wholly on the peculiar property which the blue ray possesses of being reflected, in preference to other rays more or less refrangible, by the simple mechanical resistance of the molecules of bodies which transmit light. This resistance takes place in large masses of transparent fluids, as in air mixed with watery vapor, and in water mixed with air.

It takes place also in opake bodies which are less transparent, but under smaller dimensions. Lastly, it is observed in white opake or colored bodies, as in the fine skin which covers the veins, and in mixtures of colors.

Plan for raising Vessels sunk in Deep Water. By Mr. JOHN MILNE, Teacher of Architectural and Mechanical Drawing, Edinburgh. [From the London Mechanics' Magazine.]

SIR,—Having read in a recent number of your Magazine, that Dr. Hancock has proposed the use of *air* as a power for raising goods, &c. from the bottom of the sea, I beg to forward to you a pamphlet of mine published in 1828, which contains, among other plans, two on this very principle. They attracted some share of attention at the time of publication, but neither of them has ever, as far as I am aware, been carried into actual practice. Should you see cause, I shall be glad to find that you have drawn the attention of the public to this important but neglected subject. I am, respectfully, your obedient servant, JOHN MILNE.

The pamphlet obligingly forwarded to us by Mr. Milne,* is entitled "Plans for the Floating Off of Stranded Vessels; and for raising those that have foundered; with an Improved Method of Carrying Vessels over Banks in Shallow Water." Of the two plans to which Mr. Milne more particularly invites our attention, one is adapted to the case of ships sunk near the shore, and the other to deep sea operations. Both are on the same principle—both exceedingly ingenious, and, in our humble judgment, quite practicable. We shall extract the author's description of the first at length, and beg to



refer those who may be desirous of further information on the subject, to the work itself, which is altogether well deserving of perusal.

"I shall now describe the application of these air buoys,† to the raising of a vessel that has been sunk in deep water; but before doing so, it may be proper to mention the disadvantages attending the common practice. At present we pass one or more chains round the wreck, and by means of these chains suspend it by one, or between two floating vessels, a process which in deep water is attended with much expense and uncertainty, because no sufficient power can be applied from the floating vessel to raise the wreck at once to the surface. Moreover, from the great weight of the wreck, and from the manner of placing the chains about it, they are liable to cut the timbers of the ship, as in the case of the Comet steam-boat (see Narrative of the Loss of the Comet steamboat). The operators must wait till the lowest ebb of the tide, then, pulling up the ends of the suspending chains and securing them, the rising of the water acting upon the floating vessels, lifts the wreck from the bottom; and while the tide rises, they proceed with their load towards the land, until the suspended vessel again rests upon the bottom, by the water becoming less in depth. Hence, they cannot, during one flowing tide, raise the sunk vessel more than the height to which the water had flowed from its lowest ebb, which at a maximum on the British coast does not exceed sixteen feet, and they must now suspend their exertions till the end of nearly twelve hours.

"Before that period arrives, however, a storm comes on, the workmen desist from their operations, and it not unfrequently happens, that before they can again commence their labors, the object of their toils has broken up, or has been imbedded in the sand.

"These inconveniences being obvious, I propose the following methods. The place of the wreck being ascertained by an improved drag, which at present I shall not describe, let her state be ascertained from a diving bell, and let there also be sent down with it a number of the before-mentioned buoys, in a perfectly collapsed state; and let the diving operator stow them away in that condition below decks, also hooking on as many about the ship as shall collectively be sufficient to buoy it up when inflated; for their inflation let him insert a small copper tube, which is attached to a leathern pipe,* into the nozle of each of the buoys (see engraving, fig. A), which pipe, communicating with the air within the diving bell (air being forced down into the steam-vessel†), will also inject air into the buoys, if they be held up, at the commencement of filling, a little higher than the level of the water at

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* Author of the excellent "Practical View of the Steam Engine."

† "Leathern bags, well sewed and tanned or barked in the best manner"—"made nearly air-tight, and proof against the attacks of vermin." [p. 5.] Mr. Milne, in a manuscript note on this passage, in our copy of the pamphlet, says: "Open-mouthed vessels of tin-plate would be preferable, to be inverted when in use, and packed into each other when not in use."—[ED. L. M. M.]

* This pipe should be sufficiently long to admit of the operator hooking on other buoys, while one bag is in the act of being filled with air.

† To be stationed over the sunken ship, (as explained in a preceding section of the pamphlet,) and provided with an air-compressing pump and a common blowing pump.—[ED. L. M. M.]

the mouth of the bell.* Or these envelopes may be speedily filled, by letting down a number of metallic vessels, charged with thirty or more atmospheres, which being discharged will quickly inflate them at the conveniency of the operator, by his turning a common stop-cock, which, in either of these methods, is all he has to do.

"Having, by one or other, or by both of these methods, filled a sufficient number of buoys, the wreck will begin to rise whenever the bags have displaced that bulk of water which is equal to the weight of the wreck while immersed in the same fluid. Let the weight to be raised from a depth of 65 feet be 300 tons avoirdupois, = 672,000 lbs. ÷ 64 lbs., the medium weight of a cubic foot of sea water, = the buoyant effect of 10,500 cubic feet of air discharged from the diving bell at that depth.

"But by using air previously compressed to thirty atmospheres, and discharged at the same depth, and by allowing the capacity of each vessel so charged to be 2½ feet, then 27† × 2½ = 67½ cubic feet of air discharged from one compressed vessel, × 64 lbs., the buoyant effect of one foot of air in sea water, = 4,320 lbs. buoyant effect of air originally compressed into one vessel; but the load to be raised was 672,000 lbs., therefore, ÷ 4,320 lbs., = 155·5, &c. compressed air vessels, allowing the apparatus to have no weight of itself. I would also propose the use of such leather buoys for giving expedition to common diving bell operations, in bringing all kinds of goods, cannon, anchors, &c. from the bottom; and also for clearing such rivers as the Tay, below the town of Perth, and many such places, where navigation and the salmon fishing are greatly impeded by large stones at the bottom of the river. The stones might be Lewis'd‡ at low water, or they might be bored from a diving bell, the collapsed buoys made fast, and at convenience they could be inflated from a boat by a common forcing pump; the stones being suspended in the water may be towed to any place for the purpose of embanking, where they could be instantly sunk by pulling up the end of the escape pipe, B; the more immediate use of which pipe is to allow the superabundance of air to escape, which, while at the bottom of the sea, is compressed by the hydrostatic action of the surrounding medium; but immediately when the envelope begins to ascend with its load, the pressure of the water becomes less, and in the same proportion will the air expand within these bags, and ultimately would burst them, were it not that this pipe allows it to escape. It should be about nine feet long, having its lower end weighed down by a nose of metal, from which the air will always be retained within the bags till its expansive force becomes more than the pressure of water at the under orifice of this escape-pipe. Indeed, the maximum expansive force of air within its envelope may always be known by the length of this pipe B. Such an escape pipe must also be attached to each of the buoys employed in raising the wreck from the bottom of the sea. I shall only remark, that it would not be necessary for these buoys to be absolutely air tight, because they may be kept sufficiently full by the method already pointed out. Nor would there be any chance of their bursting by their buoyant power, which could never exceed the weight of their bulk, and they would require to be just as strong as to be capable of retaining water without bursting when filled with it, and suspended by their hooks from a pin in the wall. I would also propose the use of these buoys for floating the large stones which are used in forming sea-fences or dykes; the stones are usually carted from low water mark, but the method here proposed would be less expensive."

* Even the azotic gas discharged by the operators might be employed for this purpose; the quantity of common air deteriorated by them being very considerable. Pepys and Allen, in their Essays on Respiration, state that an easy inspiration is about 16 cubic inches, and that the subject of their experiments made about 19 of these per minute; for which it can be shown by calculation, that four men would discharge from their lungs, in one hour, a volume of air having a buoyant power equal to 2702.08 lbs. avoirdupois, or thereby.

† The air-buoys being at a depth of 65 feet, would be compressed by the water with a force equal to the weight of two atmospheres.

‡ A Lewis consists of three bars of iron, which are square on their section, when cut at right angles to their sides; these being placed side by side, form something like a dove-tail tenon; a corresponding mortice is cut in the stone to be raised, and the two outside bars are first placed within this aperture; the centre bar being throughout of equal thickness, is next placed between them, and a bolt with a clutch-ring is passed through the heads o all the three, by which the stones may be suspended. This instrument has long been in use, and is almost indispensable in a massive building.

Cast Iron Pumps.—The following drawing represents a pump about two and a half feet high, and is designed for cisterns, particularly in kitchens, barns, green-houses, and other out buildings. The pump may be placed within the building, and the water drawn from a cistern without the building by the aid of a bended tube of copper or lead. The following are the directions for setting and using.

Unscrew the three screws in the bottom of the pump, and it will then be separated into three parts.

After placing the pipe into the well, carry the other end through the floor and sink, or where you wish the pump to stand; then put the bottom plate over the end of the pipe about three-fourths of an inch, and with a piece of wood the shape of an hen's egg, you will easily bend the lead into the place left in the plate for it; then hammer it down level with the top of the plate, and screw down the plate with wood screws, placing a piece of leather or cloth under the plate to make it tight, if it is set in the bottom of the sink; then place the leather valve and pump as you took them apart, and screw them together tight, after having wet the leather in warm water.

The pipe should be placed a little descending from the sink to the well, so that the water will run out freely when necessary. This pump is so constructed, that by raising the brake clear up, the valves are opened, and the water passes off immediately out of the pump and pipe, which operation is necessary in cold weather to prevent it from freezing.

Manufactured by Scott, Keith & Co., East Bridgewater, Mass., Patentees, and sold by H. Huxley & Co. 81 Barclay street, New-York. Price, small size $8; large size $10.

The Thames Tunnel.—The completion of this great undertaking seems, if practicable, likely soon to be attempted, as several scientific and distinguished persons have lately visited it, and on Monday last Mr. Brunel received many of the members of the Royal Society to view it, and conducted them to its extreme end, where tables were laid out, having drawings, &c., showing the whole progress of the work, the great difficulties that have already been overcome in carrying the tunnel 600 feet under the Thames, and the data upon which the engineer confidently anticipated being enabled to complete this bold undertaking, were the necessary funds supplied. Mr. Brunel, at considerable length, detailed the exertions that have been used to overcome the difficulties arising from the irruption of the river, and stated that in the course of the work the miners had for twenty-seven days pushed on the tunnel over a quicksand. The members of the Royal Society, after leaving the tunnel, proceeded to view the experimental arch constructed on a new plan by Mr. Brunel. The structure is built with bricks and Roman cement, and consists of two semi-arches, springing from the same pier, without any support. By this plan an arch of the greatest span may be constructed without centering, and demonstrating, as the projector observed, the practicability of building a tower of brick-work 50 feet high, and 200 feet in diameter, and sinking the whole gradually in one mass. By this method it is intended to complete the circular and winding carriage approaches to the tunnel. It may be interesting to observe that of the two semi-arches one is shorter than the other, and it has been loaded with about eleven tons of iron for the last nineteen months, without any sensible change in its position. The company, after expressing their high satisfaction at the novelty of the works of the tunnel, and the last invention, partook of a cold collation.—[English paper.]

Mechanics in Canton.—There is no machinery, properly so called, in Canton. Much of the manufacturing business, required for the supply of commercial houses in the city, is done at a town situated at a short distance; still the amount of labor performed in Canton is very considerable. There are about 17,000 persons in Canton employed in silk weaving. The number of persons engaged in manufacturing different kinds of cloth is about 50,000. They occupy 2,500 shops, averaging usually twenty hands in each shop. Some of the Chinese females, who devote their time to embroidery, secure a profit of from twenty to twenty-five dollars per month. The number of shoemakers is more than 4,000. Those who work in wood, brass, iron, stone, and other materials, are numerous; and those who engage in each of these occupations form a distinct community, and are governed by their own laws and regulations in their business. The *barbers* form a separate department. No man can act as tonsor without a license. The number of this fraternity in Canton is more than 7,000. The whole number of mechanics in the city is estimated at 250,000.

Morris Canal.—We learn that owing to a difference between the Morris Canal Company and the Jersey City authorities as to the price of property, the contemplated continuation of the Canal will probably pass through Harsimus, and terminate nearly a mile north of the Ferry, instead of the place originally designated, which was contiguous to the termination of the Railroad.—[Newark Daily Advertiser.]

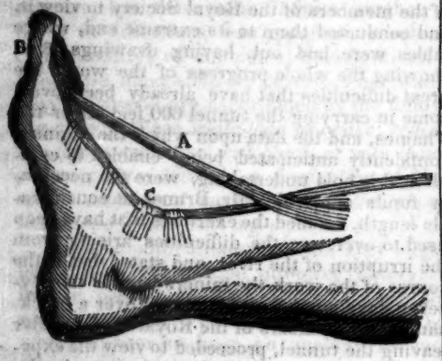
We copy the following from the forthcoming number of the Mechanics' Magazine:

Animal Mechanics, or Proofs of Design in the Animal Frame. [From the Library of Useful Knowledge.]

(Continued from page 248.)

We may perceive the same effect to result from the course of the tendons, and their confinement in sheaths, strengthened by cross straps of ligament. If the tendon, A, (fig. 27) took the shortest course to its ter-

Fig. 27.

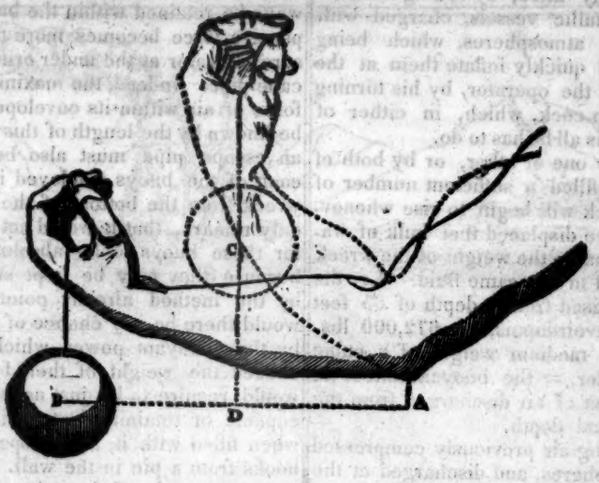


mination at B, it would draw up the toe with greater force; but then the toe would lose its velocity of movement. By taking the direction, C, close to the joints, the velocity of motion is secured, and by this arrangement the toes possess their spring, and the fingers their lively movements. We may take this opportunity of noticing how the mechanical opposition is diminished as the living muscular power is exhausted. For example, in lifting a weight, the length of the lever of resistance will be from the centre of the elbow joint, A, (see engraving on the next column, fig. 28,) to the centre of the weight, B. As the muscles of the arm contract, they lose something of their power; but in a greater proportion is the mechanical resistance diminished, for when the weight is raised to C A D, it becomes the measure of the lever of resistance.

A more admirable thing is witnessed by the anatomist—we mean the manner in which the lever, rising or falling, is carried beyond the sphere of action of one class of muscles, and enters the sphere of activity of others. And this adaptation of the organs of motion is finely adjusted to the mechanical resistance which may arise from the form or motion of the bones. In short, whether we contemplate the million of fibres which constitute one muscle, or the many muscles which combine to the movement of the limb, nothing is more surprising and admirable than the adjustment of their power so as to balance mechanical resistance, arising from the change of position of the levers.

In the animal body there is a perfect relation preserved betwixt the parts of the same organ. The muscular fibres forming what is termed the belly of the muscle, and the tendon through which the muscle pulls, are two parts of one organ; and the condition of the tendon indicates the state of the muscle. Thus jockeys discover the qualities of a horse by its sinews or tendons. The most approved form in the leg of the hunter, or hackney, is that in which three convexities can be distinguished,—the bone, the prominence of the elastic ligament behind the bone, and behind that the flexor

Fig. 28.



tendons, large, round, and strong. Strong tendons are provided for strong muscles, and the size of these indicate the muscular strength. Such muscles, being powerful flexors, cause high and round action, and such horses are safe to ride; their feet are generally preserved good, owing to the pressure they sustain from their high action. But this excellence in a horse will not make him a favorite at Newmarket. The circular motion cannot be the swiftest; a blood horse carries his foot near the ground. The speed of a horse depends on the strength of his loins and hind quarters; and what is required in the fore-legs is strength of the extensor tendons, so that the feet may be well thrown out before, for if these tendons be not strong, the joints will be unable to sustain the weight of his body when powerfully thrown forward, by the exertion of his hind quarters, and he will be apt to come with his nose to the ground.

The whole apparatus of bones and joints being thus originally constituted by Nature in accurate relation to the muscular powers, we have next to observe that this apparatus is preserved perfect by exercise. The tendons, the sheaths in which they run, the cross ligaments by which they are restrained, and the *bursæ mucosæ** which are interposed to diminish friction, can be seen in perfection only when the animal machinery has been kept in full activity. In inflammation and pain, and necessary restraint, they become weak; and even confinement, and want of exercise, without disease, will produce imperfections. Exercise unfolds the muscular system, producing a full bold outline of the limbs, at the same time that the joints are knit, small, and clean. In the loins, thighs, and legs of a dancer, we see the muscular system fully developed; and when we turn our attention to his puny and disproportioned arms we acknowledge the cause—that in the one instance exercise has produced perfection, and that, in the other, the want of it has occasioned deformity. Look to the legs of a poor Irishman travelling to the harvest with bare feet: the thickness and roundness of the calf show that the foot and toes are free to permit the exercise of the muscles of the leg. Look again to the leg of our English peasant, whose foot and ankle are tightly laced in a shoe, with a wooden sole, and you will perceive, from the manner in which he lifts his legs, that the play of the ankle, foot, and toes, are lost, as much as if he went on stilts, and therefore are his legs small and shapeless.

And this brings us naturally to a subject of some interest at present: we mean the new fashion of exercising our youth in a manner which is to supersede dancing, fencing, boxing, rowing, and cricket, and the natural impulse of youth to activity.

By this fashion of training to what are termed *gymnastics*, children at school are to be urged to feats of strength and activity, not restrained by parental authority, nor left to their own sense of pleasurable exertion. They are made to climb, to throw their limbs over a bar, to press their feet close to their hip, their knees close to their stomach; to hang by the arms and raise the body; to hang by the feet and knees; to struggle against each other by placing the soles of their feet in opposition, and to pull with their hands. No doubt if such exercises be presevered in the muscular powers will be strongly developed. But the first question to be considered is the safety of this practice. We have seen a professor of gymnastics, by such training, acquire great strength and prominence of muscles; but by this unnatural increase of muscular power, through the exercise he recommended, he became ruptured on both sides. The same accident has happened to boys too suddenly put on these efforts.

It is proper to observe, that when the muscular power is thus, we may say preternaturally increased, whether in the instance of a race-horse, an opera-dancer, or a pupil of the Calisthenic school, it is not merely necessary to put them on their exercises gradually in each successive lesson, but each day's exertion must be preceded by a wearisome preparation. In the great schools, like that at Stockholm, the master makes the boys walk in a circle; then run, at first gently; and so he gradually brings them into heat, and the textures of their frame are composed to that state of elasticity and equal resistance, as well as to vital energy, which is necessary for the safe display of the greater feats of strength and activity. This caution in the public exercises is the very demonstration of the dangers of the system. The boys will not be always under this severe control, and yet it is important to their safety.

We may learn how necessary it is to bring

* These *bursæ mucosæ* (mucous purses) are sacks containing a lubricating fluid. They are interposed wherever there is much pressure or friction, and answer all the purposes of friction wheels in machinery.

the animal system gradually into action from the effects of very moderate exercise on a horse just out of the dealer's hands. The purchaser thinks he may safely drive him ten miles, not aware that the horse has not moved a mile in a week, and the consequence is inflammation and congestion in his lungs. The regulation in the army has been made on a knowledge of these facts. When young horses are brought from the dealer they are ordered to be walked an hour a day the first week, two hours a day the second week, three hours a day in the third week. They are to be fatigued by walking, but they must not be sweated in their exercise. Horses for the turf, under three years old, in training for the Derby, are brought very slowly to their exercise, beginning with the lounge; then a very light weight is put upon them, and that gradually increased. Indeed, nothing can better show the effects of exercise in perfecting the muscular action than the consequence of the loss of one day's training. It will bring the favorite to the bottom of the list, and that without any suspicion of lameness; but from a knowledge of the fact, that even such a slight irregularity in his training will have a sensible effect on his speed. Shall the possibility of pecuniary loss excite the jockey to more care for his horse than we, in our rational and humane attention to the education of our youth, pay to their health and safety?

In reflecting on these many proofs of design in the animal body, it must excite our surprize, that anatomy is so little cultivated by men of science. We crowd to see a piece of machinery, or a new engine, but neglect to raise the covering which would display in the body the most striking proofs of design, surpassing all art in simplicity and effectiveness, and without any thing useless or superfluous.

A more important deduction from the view of the animal structure is, that our conceptions of the perfection and beauty in the design of nature are exactly in proportion to the extent of our capacity. We are familiar with the mechanical powers, and we recognize the principles in the structure of the animal machine; and, in proportion as we understand the principles of hydrostatics and hydraulics, are able to discern the most beautiful adaptation of them in the vessels of an animal body. But when, to our further progress in anatomy, it is necessary that we should study a matter so difficult as the theory of life, imperfect principles or wrong conceptions distort and obscure the appearances: false and presumptuous theories are formed, or we are thrown back in disappointment into scepticism, as if chance only could produce that of which we do not comprehend the perfect arrangement. But studies better directed, and prosecuted in a better spirit, prove that the human body, though deprived of what gave it sense and motion, is still a plan drawn in perfect wisdom.

A man possessed of that humility which is akin to true knowledge, may be depressed by too extensive a survey of the frame of nature. The stupendous changes which the geologist surveys—the incomprehensible magnitude of the heavenly bodies moving in infinite space, bring down his thoughts to a painful sense of his own littleness: "to him, the earth with men upon it will not seem much other than an ant hill, where some ants carry corn, and some carry their young, and some go empty, and all to and fro a little heap of dust."*

He is afraid to think himself an object of Divine care; but when he regards the structure of his own body, he learns to consider space and magnitude as nothing to a Creator. He finds that the living being which he was about to contemn, in comparison with the great system of the universe, exists by the continuance of a power no less admirable than that which rules the heavenly bodies; he sees that there is a revolution, a circle of motions, no less wonderful in his own frame, in the microcosm of man's body, than in the planetary system; that there is not a globule of blood which circulates but possesses attraction as incomprehensible and wonderful as that which retains the planets in their orbits.

The economy of the animal body, as the economy of the universe, is sufficiently known to us to compel us to acknowledge an Almighty Power in the creation. What would be the consequence of a further insight—whether it would conduce to our peace or happiness, whether it would assist us in our duties, or divert us from the performance of them,—is very uncertain.

CHAPTER VII.

BOOKS REFERRING TO THESE SUBJECTS MORE GENERALLY.—Ray, "On the Wisdom of God manifested in the Works of the Creation," has several chapters on the animal economy.

Archdeacon Paley has composed a work of high interest, by taking the common anatomical demonstrations, and presenting them in an elegant and popular form. His work is entitled Natural Theology; or Evidences of the Existence and Attributes of the Deity, collected from the Appearances of Nature.

The celebrated Fenelon has, with the same pious object, composed a small duodecimo, in which he draws his arguments from the structure of animal bodies.

Wollaston, in the "Religion of Nature delineated," has the same train of reflection to prove that there can be no such thing as chance operating in and about what we see or feel; and he says, with great propriety, "How may a man qualify himself so as to be able to judge of the religions professed in the world; to settle his own opinions in disputable matters; and then to enjoy tranquillity of mind, neither disturbing others, nor being disturbed at what passes among them?"

Derham, in sixteen sermons, preached in 1711, at the lecture founded by Mr. Boyle, treats at length of the structure of our organs. These are also published separately under the title of *Physico-Theology;* and they naturally suggest to learned divines the expediency of sometimes expounding to their hearers the evidences of design apparent in the universe, as a sure means of enlightening their understandings, elevating their views, and awakening their piety.

This cultivation of the mind, by exercising it upon the study of proper objects, is a man's first duty to himself. Without it he can have no steady opinion on points of the nearest concern. He is wrought upon by circumstances which ought not to sway the mind of a sensible man; at one time depressed to the depths of despondency, and at another exalted into unreasonable enthusiasm. Without such cultivation, were a man to live a hundred years, he is at last like one cut off in infancy.

* Bacon.

AGRICULTURE, &c.

ON THE MANUFACTURE OF POTASH.—It is remarkable that the manufacture of potash, which has formed so considerable and profitable an employment for the industry of the northern states, has never been in operation in Virginia. Of course no satisfactory answer to the following letter of inquiry on this subject was to be obtained at home—and it was therefore sent to a gentleman who resides at Cayuga county, New-York, whose location, as well as his general information, it was inferred, would enable him to give the statements required. He has kindly complied with the request, by sending the communication inserted below. We also add the article on this manufacture in Rees' Cyclopædia.—[Farmers' Register.]

The enormous waste of wood throughout Virginia and the southern states, induces me to inquire whether a considerable saving to the country may not be effected, by converting a portion of it into potashes, and by preparing the bark of certain descriptions of trees, for tanning and dyeing.

In clearing our lands, it is the practice to burn all the wood which is not used for fence rails, and no care is taken of the ashes. It is well known that from the branches and twigs of oak, a larger quantity of potash is obtained than from the same weight of the trunk of the tree, and that the branches are entirely lost with us in clearing land.

Now, my object in addressing you is to request that you will obtain and publish the most simple and clear directions for making and preparing potashes for market, embracing the cost of all requisite apparatus, labor, &c., and the quantity produced from a given weight or measure of white oak, red oak, and other woods common to our country. The preparation of bark for exportation might also be valuable, if the mode of doing it was made known to our farmers. QUERIST.

William Culver, Esq., from whom the following particulars were obtained, has been concerned in the manufacture of potash for many years.

It is estimated that 450 bushels of good *house ashes* will make a ton of potash. Some skilful workmen can produce more. The manager of his works contracted to make a ton from every 425 bushels; and he has even made that quantity from 420 bushels; but it is more than common workmen can produce.

Of *field ashes* about 550 bushels are required to make a ton. This difference is owing to impurities, and to a want of compactness in the ashes. Great care should be used in scraping them up, so as to exclude as much dirt as possible. It requires more care to work them.

At this time, house ashes are worth 10 cents a bushel, at the ashery; and field ashes, 7 cents.

One man can manage an ashery, consisting of the different vessels hereafter to be mentioned. There ought to be six leaches (or leach tubs), each ten feet long, constructed in the following manner: Lay two parallel sills, *one a little higher than the other*. On these *the bottom* of the leaches are laid—made of boards four feet long, not grooved and tongued, but *breaking joints*. These should be a foot high from the ground, so as to admit a trough under the lower edge to catch the ley, and to lead it into the ley tub, which may be a half hogshead sunk in the ground, and which will serve for *two* leaches.

The boards, four feet in length, which constitute the sides of the leach, are held together by two rectangular frames; the lower one resting on the bottom is eighteen inches, and the

upper, near the top of the leach, three and a half feet wide.

On the bottom of the leach, lay small sticks crossing each other, to the height of two inches, for the purpose of letting the ley run off freely. On these place straw, to be four inches thick when well pressed down, to prevent the ashes from washing through, and mixing with the ley. Three bushels of lime to each leach are spread on the straw: its effect is to facilitate the melting of the potash. Every *third* time that the leaches are filled, new lime is to be applied after ejecting the old.

The ashes, when thrown into the leaches, must be made compact by pounding it down. In this way a leach will hold 60 bushels.

The leaches are worked in pairs. One pair may be *running* while the second is *soaking*, and the third is being *emptied* of old ashes, or being *filled* with new. This arrangement prevents the workman from losing time by waiting, or from being too much hurried at another time.

Two potash kettles, of 90 gallons each, are wanted for boilers, and may cost about $35 a piece. These are set in arches. Several sugar kettles, containing about 20 gallons each, will also be wanted for *coolers*.

The manufacture of potash is generally commenced in the spring, when there is no longer any danger from freezing.

Ley, too weak to bear an egg, is not put into the boilers, but is used for wetting such leaches as have not begun to run.

During the boiling, a *dipping pan* is placed in each boiler, resting on the bottom, to catch the *black salts* as they settle; and when the pan is full, it is emptied from time to time. By this process, the ley will not become so thick, and consequently evaporate faster.

When the strong ley (such as will bear an egg,) from the *two* leaches, is all poured into the boilers, then increase the fire. For this purpose, *good dry wood is necessary*. The black salts are now to be *returned* to the boilers; and there will be a danger of the liquid running over. This is prevented by dipping it up and pouring it back into the boiler. Repeat it till this disposition to rise over shall disappear. Then raise the heat still more till the potash is perfectly *melted*, and becomes almost as thin as water. It is then to be dipped out into the coolers, *being careful to have them* VERY DRY. Let the potash stand till next day—it will crack into four quarters. Turn it out, and it is fit to barrel.

My informant suggests there would be a great advantage in having some person to start the works who was well acquainted with the business. D. T.

Article on Carbonate of Potash in Rees' Encyclopædia.—The potash of commerce, or black potash, as it is also called, is universally procured from the combustion of wood; and therefore its preparation can only be undertaken with success in those uncleared countries where are vast natural forests, and where, from the imperfection or distance of transportation, the value of timber is no more than that of the labor required to fell it. The only districts in Europe in which any considerable quantity of potash is made, are the mountainous forests in Germany, and the extensive woodland tracts of Poland and Russia. The British market is principally supplied from the United States, a country in which, from its rapid increase of population, there is a constant demand for cleared land, for the purpose of agriculture; and therefore, where timber is looked upon rather as an incumbrance than as contributing either to the beauty or the value of the ground on which it stands.

The American method is to pile up the wood, as soon as it is sufficiently dry to burn, in large heaps, and reduce it as quickly as possible to ashes: these ashes are then put into a wooden cistern, with a plug at the bottom of one of its sides, and a quantity of water, sufficient to make a strong lixirium, is added. After standing for an hour or two, the plug is withdrawn, and the water holding the potash in solution runs out, leaving the earthy parts till impregnated with a portion of alkali in the cistern. This solution is then evaporated to dryness in iron pans, and hastily fused into compact reddish brown masses of semi-caustic potash, in which state it is fit for market.

In Germany, where the value of wood is greater, care is taken to select such kinds as are the richest in potash; the combustion is slower, and of course the temperature lower, in consequence of which, but little is lost by volatilization; the lixiviations also of the ashes are judiciously repeated till the alkali is extracted.

Proportion of potash afforded by 100 parts of wood of different species, which being previously dried, were burned by an open fire to ashes; and which, after being weighed, were lixiviated till all their saline contents were extracted.

	Ashes.	Salt.	Salt from 100 parts of Ashes.
Oak,	1.03	0.15	11.1
Beech,	0.58	0.12	21.9
Aspen,	1.22	0.07	6.1
Fir,	0.34	0.04	13.2

[Academy of Sciences at Paris.]

SAVOY CABBAGES.—The green curly savoy cabbage is one of the finest garden vegetables that is grown, and ought to take the place of every kind of cabbage put up for winter's use for the table. It is as hardy and as easily cultivated as any other kind of cabbage; it is much more delicate, sells more readily, and as many, indeed rather more, can be grown from a square in the garden, or from an acre of land.

An acre of land has 4310 square yards—equal to 43,560 square feet: two feet wide each way is enough to plant the savoy cabbage; thus, an acre would yield 10,890 cabbages, which require as little cultivation as potatoes, after the ground is well prepared, and the plants are planted out, and which would bring, at the moderate price of one cent apiece, the enormous sum of one hundred and eight dollars and ninety cents.

PRESERVING AND PLANTING PEACH PITS.—Seeds intended for planting should be buried in the ground immediately after the flesh is taken from them, to prevent their becoming dry, as in that case they are more sure to come up, than when they are allowed to dry and remain out of the ground until late in the fall. Whether the seeds are planted at first in the places where they are to remain, or are buried as preparatory for planting, it is important that they should be put in the ground either before they become dry, or so early in the season that they may swell again before winter, and that they should be so near the surface as to insure their being frozen, otherwise they may lie in the ground, like rose and thorn seed, one year before they will vegetate.

PRESERVING BACON.—Dr. Bartlett: There is much said about preserving Bacon. I have noticed in all the communications on the subject, that it is recommended to have the Bacon *well dried;* and I think this is the principal thing required. If Bacon is not well dried, there is nothing that it can be packed in, that will keep it sound. When Bacon is hung up for drying, boards or plank should be laid on the joints over it, in order to keep dirt or dust from falling on it, also to keep the smoke from escaping too soon. A smoke should be kept under it till it is thoroughly dry, and be continued in wet weather in the summer. Whoever will follow this plan will save their Bacon.—[Southern Planter.]

NATIONAL WEALTH.—Who promote national prosperity? Those who promote virtue and religion.—Who destroy it? Those who encourage the vicious, either by example or precept.

NEW-YORK AMERICAN.

MAY 24—30, 1834.

LITERARY NOTICES.

No. XXV.

Galena, Upper Mississippi, February 22d.

When I came to look round, in the morning, at the place where you last left me so fortunately accommodated, I found that our host, an enterprizing Kentuckian, had been very fortunate in his choice of a location: it was a rockyand,as I was assured,healthful dell,about a hundred feet below the surrounding prairie, abounding in lead ore, and having a fine stream, with a considerable cascade, winding through its wooded bosom. His house was situated among a clump of ashes and elms, and a crystal spring burst from beneath an ancient sycamore within a few yards of it, n what resembled a torrent rather than an ordinary fountain of water, making altogether in summer a most delicious retreat, and affording even in winter a very agreeable change from the windy prairie above. But inviting as it appeared, this sequestered spot would not seem equally attractive to every one who should see that strong block house, within a few hundred yards of this peaceful dwelling, and know that it is thus placed out in the naked prairie, to prevent the secret approach of a lurking foe, when the family of the miner resort within its wooden walls for protection. Passing this block house, after an early breakfast, we struck a track leading to the Platte Mounds, which were distinctly visible, as they reared their blue tremontane peaks in the morning air: we travelled through a beautiful country of mingled grove and prairie, while large herds of deer were occasionally to be seen roving about for miles away. Frequently, in places where no other traces of man were to be seen, we would come to trenches opened by the miners, who had either been driven away by the Indians, or abandoned the pursuit of mineral in one place to try it in another. These trenches bear exactly the appearance of a grave, and are about the same size, and you meet sometimes in a few miles ride, not one or a dozen, but hundreds; the high price of lead, before the Winnebago difficulties of '28, having attracted a vast number of adventurers to this region, who have since abandoned it for the mineral regions of Missouri. In one place, at last, we saw two miners at work out on the prairie, off afar from any house; and finding, on approaching the spot where they were sinking the shaft, that they had a windlass at work, my friend politely consented to wait till I could descend and see how things looked below. I was let down by the rope in a few moments, and passing through an upper crust of rich soil, at least three feet thick, a stratum of gravel succeeded, and then coming down to the clay, I found a solitary miner with his pick, at work upon a vein of lead ore. He was a northern man, from the State of Maine, and seemed glad to see any one from so near home, as he considered New York, when viewed from this remote point. I shook hands with him, and pocketed two or three specimens of the mineral which he struck out for me. A push of the rope then set them turning the windlass above, and my resurrection from the narrow place was effected in a few moments. There was some of the afternoon left when we arrived at the Platte Mounds; but it was late on the fourth day from Prairie Du Chien, when we reached Galena. Here, I have been sorry to lose my late agreeable fellow-traveller; and a fresh thaw having laid an embargo upon travelling by melting the snows, and rendered the streams impassable, I have employed my time, as much as possible, in looking about Galena. The mud is so deep that it is impossible to go afoot, and as these steep hills are unfit for carriages, the children going and returning from school pass the door of my lodgings, on horseback, every morning and evening; three or four boys and girls sometimes being piled on before and behind an old negro, till the mass of heads, arms and legs belonging to the juveniles, makes the fabric look like the wood-cut in the nursery book of that celebrated ancient female's residence, who had so many children, "she did not know what to do."

The population of Galena is about 1000, and that of Jo-Daviess county, in which it is situated, is computed at 5000; a very large proportion of which is engaged in mining operations. The town, for its

size, is one of the busiest places in the Union. The value of goods imported into this place, last season, amounted to $150,000. The exports of lead amounted to 7 millions of lbs. at $4 50 per cwt. There were 96 departures and 97 arrivals of steam-boats during the last season; three of which were owned by persons engaged directly in the trade. This, for a frontier town, built indifferently of frame and log houses, thrown confusedly together on the side of a hill—is certainly doing very well. People now hold their property by a somewhat precarious tenure, which prevents them from making improvements. When Government gives them title deeds to the lands they occupy, both Galena and the adjacent country will assume a very different appearance.

I took quite an extensive ride in the neigbourhood yesterday. There was to be a public meeting of the miners and other residents held about 12 or 15 miles from town, upon the subject of petitioning Congress in relation to the sale of lands; and having procured a tolerable saddle horse, I started with a gentleman, whose family name is already known among the very first in our history, and whose acknowledged talents and influence in this quarter will insure his making a figure in public life, when the new State of Ouisconsin shall take her place in the confederacy.* Having, within the few years that have elapsed since, a mere youth, he left the city of New York, to try his fortunes in the West—followed at different times the various occupations of a Lawyer, a Drover, a Miner, and lastly a Smelter; besides taking an active part in two Indian wars, where his early West Point education came favorably into play, Colonel H. is, perhaps, second only to General Dodge in knowledge of frontier affairs, and popularity with the back-woodsmen in this quarter.

I cannot give you a better idea of the thoroughly Republican state of society here, than by repeating the whimsical conversation in which I first became aware of this gentleman's being a resident of these parts.

"I allow that you know Colonel H. of your city?" asked a sturdy borderer and thriving farmer of me, a few weeks since, while in the lower country.

"Colonel H. the son of General H.? certainly I do: why, what in the world brought him out here at this season. You must be mistaken, my dear sir; the duties of his office, as U. S. District Attorney, would hardly allow him to take such a tour as this."

"*Tower*, stranger, why, he's living among us."

"Here?"

"No, not exactly on this prairie, but in the mines. The Colonel took a drove of hogs up for me, some time since."

"My dear friend," replied I, laughing heartily at the very idea, "Colonel H. would see you to the devil first, before he'd take ten steps after a drove of hogs, for you or any one else."

"By G—d, sir," rejoined the Backwoodsman, with some excitement, "you don't know little Bill; for though he *is* the son of General H. and the smartest man in all these parts to boot, he has none of your d——d foolish pride about him; but would just as soon drive any honest man's hogs over the prairie as his own."

"Certainly, sir, the Colonel H. that I mean, would just as soon drive your hogs as he would his own, but I now perceive that your "little Bill" is a very different person from the one I alluded to: yet no one could admire the independence of character you ascribe to him more than I do."

"Squire, give us your hand! you and little Bill must know each other before you leave this country."

I had an opportunity of hearing Mr. H. address a public meeting on the evening of my arrival in Galena, and was much struck with the logical precision and force with which he spoke; his fluency, clear enunciation, and thorough command of himself and his audience. His features, when animated in speaking, bore a striking resemblance to those of his great and lamented father, as exhibited in the plaster casts which are familiar to every one.

"Colonel H." said the gentleman who introduced me, "is at present disguised in a suit of broad-cloth; to have him in character, sir, you should see him in his leather shirt and drawers, driving his ox team with a load of lead into town." Mr. H. laughed in reply, and our horses being ready we mounted, and soon escaping from the muddy town, found topics enough for conversation while galloping through the oak openings on the hills beyond. The gathering proved to be not so numerous, when we arrived at the place of meeting, as I had hoped; and, though in the grouping of wild looking figures with their variety of strange faces and striking costumes, Inman's bold pencil might have found some fine studies among these miners, yet I was wholly disappointed in any outlandish exhibitions of character. They were, in fact, as civil and well behaved a set as would come to the call of a committee in any of the best inhabited wards in your city. Their politeness to me indeed—being a stranger—could not be exceeded; I never approached the fire but two or three rose to offer me a seat, and scarcely one of the company called for any thing to drink, but turning round, he would add, "stranger, won't you join us?" As we spent several hours among them merely talking and moving round without getting up any formal meeting, I had ample leisure to study the different appearances of the company, as some bent over a card table, where the pieces of dirty pasteboard were rapidly compelling the small piles of money collected there, to change hands, while others lay stretched in the sun upon the wood pile before the open door, listlessly whittling a piece of stick with their long hunting knives. Among the faces and figures that particularly struck me, I remember there was one of a tall young man of about seven or eight and twenty, whose delicate features, though somewhat embrowned with toil and exposure, were only relieved from effeminacy by a dark beard trimmed around his oval face and depending from his chin, much in the style that Sir Walter Raleigh and Shakspeare are painted—either of whose fine heads, his high, pale, and expressive forehead would not have misbecome. His figure, about six feet in height, was set off by a close fitting hunting shirt of black buckskin, lightly embroidered on the collar and arms with straw-colored silk, which, from long use, had grown so dingy as scarcely to be detected upon the rusty leather it was meant to adorn. Others there were with the common cotton hunting of the west belted around them. But the majority were dressed in rough blanket coats of every possible color; while a vest of the most costly description, with pantalooons of Kentucky jean, or vice versa, would often complete their incongruous apparel.* I could form a tolerable estimate of the intelligence of this collection of people, from observing the language which my new friend used in talking to them upon the subject that brought them together; and, when speaking in earnest, it was invariably such as one educated gentleman would use to another when comparing views upon any new topic of interest.—Upon my commenting upon this, after we had bade them farewell, and were riding off together, my companion observed, that there were not only many strong-minded men of ordinary education, who had adopted the way of life which I saw prevailing around me, but that had I time to remain longer in that section of country, he could point out to me a number of regularly educated persons, the graduates of more than one of our eastern colleges, who were seeking their fortunes in this region in the capacity of common miners. While he was yet speaking, we were accosted by a poorly clad, and in every respect ordinary looking, person, to whom my companion replied with great politeness, and then resuming the subject after we had passed the forlorn shantee which the individual called his house—"*par exemple*," he exclaimed, "that man—and a shrewd, sensible fellow he is—was bred to the bar in your State—he looks poor enough now, it is true, but I hear that he has lately struck a lead, and a few years will probably find him in independent circumstances. We are now, you observe, among his diggings; and though, at this moment, he has hands to help him, I believe he began like most of us, with his single pick. Clear that trench now, and guide your horse through those pitfalls on the right, and I will take you to a point where you may see how we get up the mineral." Following my conductor along a mile or two further of pretty rough road, we came up at last to a spot where a huge mound of dirt, with piles of lead ore scattered here and there on the adjacent ground, showed that a mine was very successfully worked beneath; and giving our horses to an accommodating fellow that stood by, we threw off our overcoats and prepared to descend into it. The orifice on the top of the mound over which a windlass was placed, was about three feet square, being lined with split logs crossing each other at the angles down to the original surface of the soil, below which point the adhesiveness of the earth seemed to be all that kept the sides of the pit together. It was so dark, however, at this part of the passage down that other precautions may have escaped me. Taking the rope from above in my hands, and placing my foot in a wooden hook attached to the end of it, I swung myself from the top, and in a few moments descended some 70 or 80 feet below the surface. The narrow chamber was of course excessively dark to one just coming from the light of day; and landing upon the edge of a tub immediately beneath the aperture through which I had descended, I lost my foothold and pitched head over heels in the water with which the bottom of the mine was flooded. "Any one hurt," cried a voice behind me, and looking round as I sprang to my feet I found myself in a long horizontal passage or narrow gallery with a grim looking miner approaching me with a lantern in one hand and a pickaxe in the other. The next moment the form of my companion darkened the opening above, and then, after landing by my side, he introduced me to the miner, who proceeded to show us about these subterranean premises. They consisted of three or four galleries, generally terminating in a common centre, though one or two short ones just commenced, appeared to run off at right angles to the rest, and the lead ore, which glitters like frosted silver in its native bed, appeared to lie in thick horizontal strata along their side. The masses were readily separated by the pickaxe from the neighboring clay, and we remained long enough to see several tubsful hauled up by the conveyance which had admitted us into these dusky regions. The labor and exposure of these miners is very great; but the life, to those who have an interest in the work, is said to be so exciting, that I am told the most indolent man, when he has once fairly burrowed under ground, and got a scent of what is called "*a Lead*," will vie in devotion to his toil with the most industrious of those who labor in the light of Heaven. His stimulus indeed resembles that of the gold-hunter; for the lead, when delivered at Galena, is as good as coin in his pocket; while if he chances to strike a rich *lead* of mineral, he at once becomes independent, as if he does not choose to work it on his own account, there are houses in Galena which will purchase him out for a handsome sum, for the sake of speculation.

It was late in the evening, when, after taking this wide circuit, I once more regained my lodgings at Galena. I found the tavern entirely deserted, and upon inquiring the cause, and learning that there was "a play to be acted in town," I rode off at once to the door of the theatre. It proved to be in an unfinished building on the side of a hill, the basement of which entering the lower street, was fitted up as a stable, there being no flooring to the apartment above it, so that you stepped over the naked beams above the horses heads, if deviating from the plank which formed a passage way to a rude staircase leading into the histrionic realms in the uppermost story. The company consisted of four grown persons, and a child of about ten years old, and the play was the Melo-drama of The Woodman's Hut. A thing so easily turned into ridicule would be game not worth hunting down, and I mean therefore to disappoint any ill-natured expectations you may have of the picture I could give of Galena theatricals.—That the rest of the audience were at least as liberal as myself, you may gather from the fact of their showering half dollars like peas upon the stage, to express their delight of the little girls dancing, between the act, which certainly did not surpass that of the Vestris, not to mention Taglioni. In the midst of the performance of the Melo-drama, I happened to be standing in the apartment—if it may be so called, at the foot of the staircase—below, when I was not a little startled at the passage of a heavy missile by my ears, which, striking fire from a beam near to where I was standing, concluded its career by giving a hearty thump to a horse who was ruminating in his stall beneath. The mystery was presently cleared up by a little negro dropping at a bound from the entrance to the Thespian hall above, and exclaiming, "Did you see a gun come by here, sir? The Count went to stand it in the corner and it slipped between the planks of the floor." I directed the imp to the realms below, and

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* A period much less remote than you would think it. The country between Rock river and the Ouisconsin combines more advantages for emigration than any I have seen in my whole Western tour. That lying between the Fox river and Lake Michigan is celebrated as being equally good, and, supposing the Indian difficulties to be now forever terminated in this quarter, this region will fill with Northern emigrants, the moment it becomes known. A glance at the map will show how favorably it is situated for trade, commanding the markets alike of New York and NewOrleans.

* A Backwoodsman when he lays aside his buckskins and hunting shirt, is anxious to dress in the finest broadcloth—at least I have derived that impression from what I have seen, and from being told by a merchant in extensive business in Galena, that the very best of dry goods will alone command a sale in the mines.

starting at once for my lodgings, had no further opportunity to study these unrehearsed stage effects. The want of a regular theatre many will think a merit in so small a town as Galena; but there is another defect in the place, and, indeed, in almost all western towns where you get so far beyond the mountains that is not so easily got over, and that is, the want of female society. The number of males in proportion to females on the frontiers, is at least two to one; and girls of fifteen, (I might say twelve) or widows of fifty, are alike snapped up with avidity by the disconsolate bachelors. In the mines a few years since, their eyes were so seldom cheered with the sight of the better part of creation, that I was told by an old borderer, "he had travelled twenty miles, only to get a look at a petticoat, where it was rumored that there was actually one in the neighborhood." Even now they talk seriously in Galena of getting up an importation of ladies, for the especial amelioration and adornment of the place. How so delicate a matter is to be managed, in our fastidious age, I am unable to divine, unless, indeed, they should invite the blooming ones hither, under the ostensible purpose of getting up a fair, and then persuade them to remain and cheer these monastic abodes. I have been more than once feelingly appealed to, to make the languishing condition of these hermits of the prairies, known in more favored parts of the country; while, not wishing to betray the slenderness of my influence with the fair parties they would conciliate, I have avoided making rash promises of using my feeble offices in their favor. The only method of serving their cause I have yet hit upon is, to have inserted in the newspapers, after my arrival home, under the head of "Singular fact," "Remarkable phenomenon," "Unequalled spirit," or "Sudden disappearance," some such paragraph as this: "It is attested by credible witnesses, among whom are some of the oldest and most respectable inhabitants of Galena, that single ladies, visiting their friends in that place, never see "a second winter." H.

Complete Works of Walter Scott, Vol. vi., in seven parts. N. Y.—Conner & Cooke.—Thus far has this very cheap and well printed edition of Scott's works *progressed* towards its completion: the first and the last volume are now alone wanting. The materials for the first have not yet been published in England; those of the seventh and last are already on hand, and will in due course appear. We have only to commend, as in the past, the materials and typographical execution of this work.

Sketches, by Mrs. Sigourney. Philadelphia: Key & Biddle.—We took a hasty and passing notice on Saturday last, of these beautiful Sketches, hoping to-day to have more space to devote to them, but we are little better off in that particular than before. We must, however, at least enumerate the contents of the volume, and give a short extract from one of its highly-wrought tales.

The Sketches are six in number: the Father, the Legend of Oxford, the Family Portraits, Oriana, the Intemperate, and the Patriarch. Some of them, especially the Intemperate, which was published at length in this paper, may be known to our readers: yet in this permanent form, combined as they are with others now for the first time published, they will be valued, as constituting a charming volume. From *The Patriarch*, a sketch of a colony of North Carolina, remote from civilization and from the intercourse of men, where the founder and father of the colony was also its priest, we extract a passage, which, though beautiful in itself, yet is less effective thus torn from the context, than in its original connexion. It relates the death of the Patriarch. The *Lay Reader* was his eldest son.

Never will that scene be effaced from my remembrance: the expressive features, and thrilling responses, of the Patriarch, into whose expiring body the soul returned with power, that it might leave this last testimony of faith and hope to those whom he loved, are among the unfading imagery of my existence. The spirit seemed to rekindle more and more, in its last lingerings around the threshold of time. In a tone, whose clearness and emphasis suprized us, the departing saint breathed forth a blessing on those who surrounded him, in the "name of that God, whose peace passeth all understanding."

There was an interval, during which he seemed to slumber. Whispers of hope were heard around his couch, that he might awake and be refreshed.—At length, his eyes slowly unclosed. They were glazed and deeply sunken in their sockets. Their glance was long and kind upon those who hung over his pillow. His lips moved, but not audibly. Bowing my ear more closely, I found that he was speaking of Him who is the "resurrection and the life." A slight shuddering passed over his frame, and he was at rest, for ever.

A voice of weeping arose from among the children, who had been summoned to the bed of death. Ere I had attempted consolation, the lay-reader with an unfaltering tone pronounced, "the Lord gave, and the Lord hath taken away: *blessed be the name of the Lord.*"

Deep silence ensued. It seemed as if every heart was installing him who spake, in the place of the father and the governor who had departed. It was a spontaneous acknowledgment of the right of primogeniture, which no politician could condemn. He stood among them, in the simple majesty of his birthright, a ruler and priest to guide his people in the way everlasting. It was as if the mantle of an arisen prophet had descended upon him, as if those ashen lips had broken the seal of death to utter "behold my servant whom I have chosen." Every eye fixed upon him its expression of fealty and love. Gradually the families retired to their respective habitations. Each individual paused at the pillow of the Patriarch, to take a silent farewell; and some of the little ones climed up to kiss the marble face.

I was left alone with lay-reader, and with the dead. The enthusiasm of the scene had fled, and the feelings of a son triumphed. Past years rushed like a tide over his memory. The distant, but undimmed impressions of infancy and childhood,—the planting of that once wild waste,—the changes of those years which had sprinkled his temples with gray hairs,—all, with their sorrows and their joys, came back, associated with the lifeless image of his beloved sire. In the bitterness of bereavement, he covered his face, and wept. That iron frame which had borne the hardening of more than half a century, shook, like the breast of an infant, when it sobs out its sorrows. I waited until the first shock of grief had subsided. Then, passing my arm gently within his, I repeated, "I heard a voice from heaven saying,—'Write, from henceforth, blessed are the dead, who died in the Lord." Instantly raising himself upright, he responded in a voice whose deep inflections sank into my soul, "Even so, saith the spirit, for they rest from their labors, and their works do follow them."

I remained to attend the funeral obsequies of the Patriarch. In the heart of their territory was a shady dell, sacred to the dead. It was surrounded by a neat inclosure, and planted with trees. The drooping branches of a willow, sweep the grave of the mother of the colony. Near her slumbered her youngest son. Several other mounds swelled around them, most of which, by their small size, told of the smitten flowers of infancy. To this goodly company, we bore him, who had been revered as the father and exemplar of all. With solemn steps, his descendants, two and two, followed the corpse. I heard a convulsive and suppressed breathing, among the more tender of the train; but when the burial-service commenced all was hushed. And never have I more fully realized its surpassing pathos and power, than when from the centre of that deep solitude, on the brink of that waiting grave, it poured forth its consolation.

Letters of John Randolph *to a young relative*, &c. &c.; 1 vol.; Philad., Carey, Lea & Blanchard.—This is a selection, as we learn from a preliminary notice, from several hundred letters written by John Randolph to a young relative, and which extend through a period from early youth to mature manhood.

They indicate very strikingly the peculiarities of the writer's character, and combine with much sagacious observation, sound maxims, and valuable counsels, a good deal that is egotistical, strange and little. The measure of indulgence, however, which the friends of that distinguished individual may be entitled to expect for him from his contemporaries and from posterity, will be judged of by the following and note to letter CLIX:

"This letter was written during a lucid interval of alienation of mind; which, for the first time, amounted to positive delirium. Fits of caprice and petulance, following days of the deepest gloom, had, for years previously, overshadowed his mind, evincing the existence of some corroding care, for which he neither sought, nor would receive any sympathy.

"For many weeks, his conduct towards myself, who was the only inmate of his household, had been marked by contumelious indignities, which it required almost heroic patience to endure, even when aided by an affectionate devotion, and an anxious wish to alleviate the agonies of such a mind in ruins. All hope of attaining this end, finally failed; and, when he found that I would no longer remain with him, the above letter was written; it is almost needless to say with what effect. I remained with him two years longer.

"The truth and beauty of the eastern allegory, of the man endowed with two souls, was never more forcibly exemplified than in his case. In his dark days, when the evil genius predominated, the austere vindictiveness of his feelings towards those that a distempered fancy depicted as enemies, or as delinquent in truth or honor, was horribly severe and remorseless.

"On the contrary, when the benevolent genius had the ascendant, no one ever knew better how to feel and express the tenderest kindness, or to evince, in countenance and manner, gentler benevolence of heart.

We fear that the disease, for such undoubtedly it became, had originally more connection with the evil passions of the heart, than would seem consistent with the "gentle benevolence" thus imputed to his happier moments. Political disappointment was not, we apprehend, without its share in inducing "the gloom" of his mind—though his aspirations in politics even, seemed always vague, desiring notoriety apparently rather than power—and therefore resenting—indifferences "of which in his later letters he more than once complains, as a personal offence":

We annex some extracts from the Letters:

"Do not undervalue the character of the real gentleman, which is the most respectable amongst men. It consists not of plate, and equipage, and rich living, any more than in the diseases which that modo of life engenders; but in *truth*, courtesy, bravery, generosity, and learning, which last, although not *essential* to it, yet does very much to adorn and illustrate the character of the true gentleman. Tommy Merton's gentlemen were no gentlemen, except in the acceptation of innkeepers, (and the *great* vulgar, as well as the small,) with whom he who rides in a coach and six, is three times as great a gentleman as he who drives a post chaise and pair. Lay down this as a principle, that *truth* is to the other virtues, what vital air is to the human system. They cannot exist *at all* without it; and as the body may live under diseases, if supplied with pure air for its consumption, so may the character survive many defects, where there is a rigid attachment to *truth*. All *equivocation* and subterfuge belong to falsehood, which consists, not in using *false* words only, but in conveying false impressions, no matter how; and if a person deceive himself, and I, by my silence, suffer him to remain in that error, I am implicated in the deception, unless he be one who has no right to rely upon me for information, and, in that case 'tis plain, I could not be instrumental in deceiving him."

"To form good habits is almost as easy to fall into *bad*. What is the difference between an industrious, sober man and an idle drunken one, but their respective habits? 'Tis just as easy for Mr. Harrison to be temperate and active, as 'tis for poor Knowles to be the reverse; with this great difference, that, exclusive of the effects of their respective courses of life on their respectability and fortunes, the exercises of the one are followed by health, pleasure and peace of mind, whilst those of the other engender *disease*, *pain*, and *discontent*, squalid misery, and the contempt of the world, contrasted with affluent plenty, a smiling family, and the esteem of all *good men*.—Perhaps you cannot believe that there exists a being who would hesitate which of these two lots to choose. Alas! my son, vice puts on such alluring shapes, indolence is so seducing, that (like the flies in Æsop,) we revel whilst the sun shines, and for a few hours temporary pleasure pay the price of perishing miserably in the winter of our old age. The industrious ants are wiser. By a little forbearance at the moment, by setting a just value on the *future*, and disregarding present temptation, they secure an honorable and comfortable asylum. All nature, my son, is a volume, speaking comfort and offering instruction to the good and wise. But 'the fool saith in his heart,

There is no God:' he shuts his eyes to the great book of Nature that lies open before him. Your fate, my dear Theodorick, is in your own hands. Like Hercules, every young man has his choice between *pleasure*, falsely so called, and *infamy*, or laborious virtue and a fair fame. In old age, indeed long before, we begin to *feel* the folly, or wisdom, of our selection. I confidently trust that you, my son, will choose wisely. In seven years from this time, you will repent, or rejoice, at the disposition which you make of the present hour.

"ROANOKE, June 10, 1821.—"You do not overrate the solitariness of the life I lead here. It is dreary beyond conception, except by the actual sufferer. I can only acquiesce in it, as the lot in which I have been cast by the good providence of God; and endeavor to bear it, and the daily increasing infirmities, which threaten total helplessness, as well as I may. 'Many long weeks have passed since you heard from me.' And why should I write? To say that I had made another notch in my tally?—or to enter upon the monotonous list of grievances, mental and bodily, which egotism itself could scarcely bare to relate, and none other to listen to. You say truly: 'there is no substitute' for what you name, 'that can fill the heart.' The bitter conviction has long ago rushed upon my own, and arrested its functions. Not that it is without its paroxysms, which I thank Heaven, itself, alone, is conscious of. Perhaps I am wrong to indulge in this vein; but I must write thus, or not at all. No punishment, except remorse, can exceed the misery I feel. My heart swells to bursting, at past recollections; and, as the present is without enjoyment, so is the future without hope; so far, at least, as respects this world."

"The true cure for maladies like yours, is employment. 'Be not solitary; be not idle!' was all that Burton could advise. Rely upon it, life was not given us to be spent in dreams and reverie, but for active, useful exertion; exertion that turns to some account to ourselves, or to others—not laborious idleness. (I say nothing of religion, which is between the heart and its Creator.) This preaching is, I know, foolish enough: but let it pass. We have all two educations; one we have given to us—the other we give ourselves; and, after a certain time of life, when the character has taken its ply, it is idle to attempt to change it."

MONDAY MORNING, JAN. 21, 1822.—"I have just received your letter of Saturday, which I read with much pleasure; although I cannot think you are right in giving up exercise altogether. You know my opinion of female society. Without it we should degenerate into brutes. This observation applies with ten fold force to young men, and those who are in the prime of manhood. For, after a certain time of life, the literary man may make a shift (a poor one, I grant) to do without the society of ladies. To a young man nothing is so important as a spirit of devotion (next to his Creator) to some virtuous and amiable woman, whose image may occupy his heart, and guard it from the pollution which besets it on all sides. Nevertheless, I trust that your fondness for the company of ladies may not rob you of the time which ought to be devoted to reading and meditating on your profession; and, above all, that it may not acquire for you the reputation of *Dangler*—in itself bordering on the contemptible, and seriously detrimental to *your* professional character. A cautious old squaretoes, who might have no objection to employing such a one at the bar, would, perhaps, be shy of introducing him as a practitioner in his family, in case he should have a pretty daughter, or niece, or sister; although all experience shows that, of all male animals, the Dangler is the most harmless to the ladies, who quickly learn, with the intuitive sagacity of the sex, to make a convenience of him, while he serves for a butt, also.

"Rely upon it, that to love a woman as 'a mistress,' although a delicious delirium, an intoxication far surpassing that of Champagne, is altogether an essential, nay, *pernicious*, in the choice of a wife; which a man ought to set about in his sober senses—choosing her, as Mrs. Primrose did her wedding-gown, for qualities that 'wear well.' I am well persuaded, that few love-matches are happy ones.—One thing at least, is true, that if matrimony has its cares, celibacy has no pleasures. A Newton, or a mere scholar, may find employment in study; a man of literary taste can receive in books a powerful auxiliary; but a man must have a bosom friend, and children around him, to cherish and support the dreariness of old age. Do you remember A. V.? He could neither read nor think; any wife, even a scolding one, would have been a blessing to that poor man. After all, 'suitability' is the true foundation for marriage. If the parties be suited to one another, in age, situation in life, (a man indeed, may descend, where all else is fitting,) temper, and constitution, these are the ingredients of a happy marriage—or, at least, a convenient one—which is all that people of experience expect."

LA REVUE FRANCAISE; New York, *Hoskin & Snowden*.—This monthly periodical, now entering upon its second volume, has been united with, or rather has absorbed, *la Bibliothèque Choisie de literature francaise*, published by *Carey & Lea*, of Philadelphia—whence its chances of, and claims to, permanent success, are considerably increased. The present number contains much interesting matter, not the least attractive part of which is the article on "*Chateaubriand's Memoirs*."

LA FRANCE LITERAIRE, N. Y.—This, as our readers know, is a semi-monthly periodical, affording at an unusually cheap rate, a great variety of extracts from the current French literature.

To students of French, both the works here noticed offer, as it seems to us, cheaper and more attractive—because more varied—"school books," than the everlasting *Telemaque*, or *Gil Blas*.

RECOLLECTIONS OF A NAVAL LIFE, by CAPT. SCOTT.—This is the title of a work recently published in London, which adds another to the revolting libels upon this country emanating from the British press, and bearing the names of men whose profession—that of arms—has heretofore been thought to imply the possession of courtesy and honor, even where brains were lacking.

In three successive numbers of the London Literary Gazette, we find extracts from this work, referring chiefly to the capture of Washington, and the attack on Baltimore—at both which the author was present—the whole aim and scope of which seems to be, to represent the freebooter Cockburn, as a *peaux Chevalier*, and the Americans, one and all, as cowards and liars.

We will at another time give some specimens of this precious work.

NEW MUSIC.—The only novelty is "Hail Columbia," arranged as "a brilliant Fantasia" for the piano, by *Wm. A. King*, and published by *Firth & Hall*, Franklin Square.

SUMMARY.

[*From the National Gazette—communication from an authentic source.*]

We are extremely gratified to learn, that the unfavorable statements made in several of the newspapers, regarding the health of the venerable ex-President Madison, are somewhat exaggerated. He does not appear to be in immediate danger, although he is extremely feeble, and laboring under disease of a somewhat complicated character, which prevents him from indulging in the active intellectual and corporeal efforts, to which he has been, through a long life, accustomed. On this account, it has been enjoined on him not to harass himself by inordinate attention to the numerous questions of interest incessantly propounded to him, regarding the constitutional history of the country, or which refer to the various absorbing scenes of which he has formed so important a part, and on many of which his voice is esteemed oracular. At the advanced age of eighty-three, and upwards, and afflicted with rheumatism in his hands, it need scarcely be said that the exertion demanded in replying to such inquiries must be irksome, even as respects the mere manual part, yet many questions require answers, which, if complete, would extend to volumes. For all this kind of labor his feeble frame is inadequate, and when the fact is once known, it will, doubtless, be no longer expected of him. Every patriot and philanthropist burns with a glow of veneration towards this illustrious benefactor of his country and his race, and will pause before he requests of him any exertion of mind or body, which may tend, even in the most remote degree, to curtail the existence, or diminish the comforts of one whose whole life has been so ardently devoted to the good of humanity.

The Board of Brokers on Friday, voted a donation of *one hundred dollars* to the Colonization Society, to be expended in the colonial supplies to be shipped by the Jupiter.

NAVAL.—The United States frigate *Potomac*, J. Downes, Esq. Commander, arrived in Boston on Friday, from the East Indies, after an absence of two years and a half.

The cruise of the Potomac has been an extensive one. She was originally intended to relieve the Guerriere in the Pacific; but her destination, on the eve of sailing, was so far altered, by the Department, as to direct her to take an easterly route, by the way of the Cape of Good Hope and the Sunda Isles, and China, and after performing special duties assigned her in that quarter, to repair to her station in the Pacific. She has completed a circumnavigation of the Globe, and run, by log, more than sixty-one thousand miles, and been five hundred and fourteen days at sea. During this long period, she has never had a spar carried away, nor a man seriously injured by casualty on board, nor have all hands been called at night, but in one instance.

No one of our public vessels since the last war, has performed a cruise so varied, so extensive, and in many respects so interesting, as the one performed by the Potomac.

The Potomac left at Rio Janeiro, U. S. sloops of war Peacock, Capt. Geissinger, for the United States April 17; Natchez, Capt. Zantzinger, and schr. Boxer, Capt. Farraght. Hon. E. A. Brown, our Chargé d'Affaires to Brazil, contemplated returning to the United States in the Peacock.

The sloop of war Ontario, Capt. Salter, was at Buenos Ayres at last dates. The sloop of war Fairfield, Capt. Vallette, and schooner Dolphin, Lieut. Com. Voorhees, were cruizing at last accounts to Lima; the former had been as far as Guayaquil.

The Potomac sailed from New York on the 24th of August, 1831, and has therefore been absent two years and nine months. During her cruize she has crossed the Equator six times, and encountered dangers in navigation, unknown in ordinary voyages.—The men have been exposed to disease and pestilence in the most insalubrious regions of the earth; and shared also the risks of war in the assault and capture of the Malay forts. Yet the degree of mortality has been even less than usual on board vessels of war, only twenty-seven having died, (including those killed in battle at Qualla Battoo) out of about 500 souls on board.

OFFICERS OF THE POTOMAC.

Commodore John Downes, Commander; Irvine Shubrick, 1st Lieut.; Stephen B. Wilson, 2d do.; Henry Hoff, 3d do.; Jonathan Ingersoll, 4th do.; Matthew F. Maury, 5th acting do.; Sylvanus Godon, 6th acting do.; Alvin Edson, 1st Lieut. Marines; George H. Terrett, 2d do.; Samuel Jackson, Fleet Surg.; J. N. Reynolds, Esq., Com. Secretary; Philo White, Purser; John W. Griss, Chaplain; Robert S. Fatom, Sailing Master; M. G. L. Clairborne, Acting do.; Jonathan M. Foltz, Henry D. W. Paulding, Assistant Surgeons; Francis Warrener, Schoolmaster; David Telfair, Commodore's Clerk; Charles de Selding, Richard Jones, Master's Mates; Henry C. Hart, Wm. H. Pendleton, Levi Lincoln, Jr. John W. Taylor, George T. Sinclair, James B. Lewis, Alonzo B. Davis, Francis P. Hoban, Charles W. Morris, Wm. May, James G. Stanley, Charles Hunter, George M. Totten, Theodore B. Barrett, Eugene Begle, Wm. B. Whiting, Wm. T. Cooke, and Wm. M. E. Adams, Midshipmen; John McNolly, Boatswain; John R. Covington, Gunner; Wm. E. Sheffield, Carpenter; Christian Nelson, Sail Maker.

Passengers, Lieut. N. C. Lawrence and Mid'n V. L. Williamson, late of U. S. ship Fairfield; Assistant Surgeon Cornelius Moore, Midshipman Wm. P. Taylor, and Charles Dougherty, Gunner, late of U. S. schooner Dolphin; Mr. Philo White, late Navy Agent at Valparaiso. [Purser Wm. A. Slacum remains at Valparaiso, in charge of the Navy Agency.]

The United States ship *Peacock*, David Geissenger, Esq. Commander, arrived in this port on Sunday, from a cruize in India, and last from Rio Janeiro.—*E. A. Brown* our *Chargé d'Affaires* at Brazil, came passenger in the Peacock. We annex a list of her officers, and from the Boston papers take a notice of those of the Potomac, and some particulars of her cruise.

Officers of the Peacock.—David Geissenger, Commander; Robert B. Cunningham, H. Y. Purviance, Edward B. Boutwell, Thomas W. Brent, Lieutenants; Francis B. Stockton, Purser; Benajah Tickner, Fleet Surgeon; George Hurst, Sailing Master; Augustus S. Baldwin, George R. Caroll, Charles Thomas, William Reynolds, D. R. Crawford, H. T. Wingate, John B. Weed, A. H. Wells, Robert Patton, Midshipmen; H. M. Fowler, Lieut. of Marines;

H. N. Robinson, Schoolmaster; Frederick T. Poor, Captain's Clerk; John Barr, Acting Gunner; William Condy, Acting Carpenter; Charles H. Haven, Purser's Steward.

OFFICIAL—NAVY DEPARTMENT.

Extract from a letter addressed to the Secretary of the Navy from John A. Kearney, Surgeon of the West India squadron, dated on board the Vandalia, Pensacola, May 8, 1834.

"I have been eight months Surgeon of this fleet, and have not lost a man, a circumstance rare in these tropics, and attributable, no doubt, to the excellent police and subordination, so strictly and judiciously enforced."

An Oration in honor of Mr. WIRT, was delivered in Baltimore on Tuesday. The Baltimore American thus speaks of it:

There is but one opinion, among the crowded audience that listened to Mr. Kennedy's Oration on the death and character of Mr. Wirt, delivered in the Rev. Mr. Nevin's church on Tuesday evening, at the request of the Baltimore Bar. It was highly polished, eloquent and affecting—all that was anticipated from the accomplished speaker, and the elevating theme. The spacious building was filled, and as the orator spoke with just praise and merited affection of the genius and virtues of the illustrious dead, dwelling upon his labors, tracing his career, and unfolding the history of his mind, the graces of his life, and the moral beauty of his character—he was heard with profound and delighted attention.

We learn that the Locomotive Engine on the New-Castle and French Town Rail Road, on Friday, when on her way about seven miles from French Town, broke some of her machinery, but we believe no injury was sustained by the passengers. In consequence of the accident, the line did not arrive in Philadelphia until near four o'clock.—[Philadelphia paper.

[*From the Cincinnati Mirror.*]

THE FIRST FLAT BOAT ON THE MISSISSIPPI.—A friend called on us a few mornings since to accompany him to the shop of Mr. F. Shields, for the purpose of viewing an iron tablet, recently cast by Hanks & Niles, of this city. It is to be erected to the memory of one of the pioneers of the West, and we should judge that it will perpetuate his name through many ages. It is very spacious, with large and deeply indented letters, and is the first of the kind ever executed west of the Alleghanies.

The following is the inciption:

JACOB YODER,
Was born in Reading, Pennsylvania,
August 11th, 1758.
And was a Soldier in the Revolutionary Army in 1777 and 1778.
He emigrated to the West in 1780, and in May, 1782, from Fort Redstone, on the Monongahela River,
in the
FIRST FLAT BOAT
that ever decended the Mississippi,
He landed at New Orleans with a cargo of produce.
He died April 7, 1832, at his Farm in Spencer County, Kentucky, and lies here interred beneath this tablet.

Capt. Jacob Yoder was a highly respectable and wealthy farmer of Spencer county, Ky. To him belongs the honor of having descended the Mississippi in the first flat boat. And if no other powers than those of time, and wind, and storm shall assail it, this tablet will preserve the fact recorded upon it thro' a long series of coming ages.

No one who has any pretensions to the possession of a soul can contemplate this tablet without a variety of emotions. A brilliant series of associations enchain the mind of the gazer, as with a spell, to it.—That the man who navigated the first flat boat that ever descended the Mississippi, should have lived to see a magnificent steamboat ploughing the same watery track, is a truth which affords a subject of much admiration. When he launched his little bark on the Monongahela, what were his anticipations? Such as time has proved? No, he then thought of the wily savage, whose covert was a wide and untrodden wilderness. He proceeded on his precarious voyage. Instead of cheering aspects of busy cities, flourishing villages, and cultivated farms, which now chain the voyager's attention, he saw a range of hills, unshorn of their primeval wilderness, whence the lugubrious howl of the wolf proceeded, the vast wilderness where the foot of civilized man had not trodden, "instinct," 'tis true, "with life," but it was the life of the forest denizen, the trembling fawn, and the myriad songsters of the wild. He reached his destination, but his safety was a marvel to himself, and his dangers in after recital, wakened up a fear stricken excitement in the minds of those who listened to his tale of perils "by field and flood."—He lived to see the country change masters, the wilderness blossom as the rose, and human energy achieve a conquest over a thousand obstacles. This is the greatest triumph that man has yet achieved.—History records no parallel. To the future generations of America, it will be what the fabulous age of the Titans was to the ancient Greeks.

The manner of men's dying has often been commented upon, as indicative of individual character under circumstances where dissimulation can no longer avail. The indication is not good for much in our judgment, for there is very frequently as much study of effect, and "hollow show," in the last moments of life, as at any other period of it.

The following extracts from volume II. of a curious and clever book, called *the Doctor*, lately published in England, have some bearing on this point.

[*From the Doctor.*]

"It is one thing to jest, it is another to be mirthful,—Sir Thomas More jested as he ascended the scaffold. In cases of violent death, and especially upon an unjust sentence, this is not surprising; because the sufferer has not been weakened by a wasting malady, and is in a high state of mental excitement and exertion. But even when dissolution comes in the course of nature, there are instances of men who have died with a jest upon their lips. Garci Sanchez de Badajoz, when he was on the point of death, desired that he might be dressed in the habit of St. Francis; this was accordingly done, and over the Franciscan frock they put on the habit of Santiago, for he was a knight of that order. It was a point of devotion with him to wear the one dress, a point of honor to wear the other; but looking at himself in this double attire, he said to those who surrounded his death-bed, 'The Lord will say to me presently, "My friend Garci Sanchez, you come very well wrapt up!" (*muy arropado*) and I shall reply, "Lord, it is no wonder, for it was winter when I set off."'

"The author who relates this anecdote remarks that 'o morrer com graçia he muyto bom, e com graçias he muyto mao:' the observation is good, but untranslateable, because it plays upon the word which means grace as well as wit. The anecdote itself is an example of the ruling humor "strong in death;" perhaps also of that pride or vanity, call it which we will, which so often, when mind and body have not yielded to natural decay, or been broken down by suffering, clings to the last in those whom it has strongly possessed.

"'Don Rodrigo Calderon, whose fall and exemplary contrition served as a favorite topic for the poets of his day, wore a Franciscan habit at his execution, as an outward and visible sign of penitence and humiliation: as he ascended the scaffold, he lifted the skirts of the habit with such an air that his attendant confessor thought it necessary to reprove him for such an instance of ill-timed regard to his appearance. Don Rodrigo excused himself by saying that he had all his life carried himself gracefully! The author by whom this is related calls it an instance of illustrious hypocrisy. In my judgment the father confessor who gave occasion for it deserves a censure far more than the penitent sufferer. The movement, beyond all doubt, was purely habitual,—as much so as the act of lifting his feet to ascend the steps of the scaffold; but the undeserved reproof made him feel how curiously whatever he did was remarked: and that consciousness reminded him that he had a part to support, when his whole thoughts would otherwise have been far differently directed

"'A personage in one of Webster's plays says:

"'I knew a man that was to lose his head
Feed with an excellent good appetite
To strengthen his heart, scarce half an hour before,
And if he did, it only was to speak.'

Anecdote.—In a friend's album, Mr. Smith, keeper of the prints in the British Museum, wrote a playful account of himself, in which is the following paragraph:—"I can boast of *seven* events, some of which *great* men might be proud of—I received a kiss when a boy from the beautiful Mrs. Robinson; was patted on the head by Dr. Johnson; have frequently held Sir Joshua Reynolds' spectacles; partook of a pot of porter with an elephant; saved Lady Hamilton from falling when the melancholy news reached her of Lord Nelson's death; three times conversed with King George the Third, and was once shut up in a room with Mr. Kean's lion.—[London Paper.]

The schooner Mexico, commanded by Capt. James Almeida, and engaged in the Mexican trade, which disappeared so mysteriously some months since, is thus accounted for by a New Orleans paper: The captain and cabin passengers of that vessel were murdered by three Italians who were on board, and she was afterwards scuttled and abandoned by them somewhere on the Spanish Main.

City of Brooklyn.—The Common Council met on Tuesday, 20th, and elected George Hall, Esq. Mayor, and Cyrus P. Smith, Counsellor and Clerk. The oath of office was administered to the Mayor elect by Judge Morse. The Mayor then addressed the Board in a short speech, in which he congratulated them and his fellow citizens on the successful issue of their application for a city charter; and the more so, as it has been a struggle against the combined and unuiring opposition of a portion of their own county, and the great and influential city of New York. But while we rejoice, gentlemen, (said he,) that the legislative wisdom of our State has indignantly frowned down the narrow minded policy which has been arrayed against us by our sister city, and by an almost unanimous vote, secured to us those rights and privileges which our position, our population and wealth had a right to demand; let us not be unmindful of the additional obligations it imposes on every good citizen, and especially upon us, their representatives, to proceed with caution and prudence, in the discharge of the various duties committed to our trust. —[Commercial.]

[*From the Keene N. H. Sentinel of May* 22.]

The snow storm of Thursday last (15th May!) was very severe on the high lands in this vicinity, the snow drifting as in February. We learn that west of the mountains the snow was a foot deep, and that two of the stages from Middlebury went out on *runners*. At Haverhill, N. H. the snow fell nearly *two feet* on a level.

The Rutland Herald says the storm raged with fury from 8 o'clock Wednesday evening, to Thursday afternoon. The snow fell twelve inches. "On Friday, when the sun came to shed its beaming rays on the foliage, it was enough to make a sensitive heart sick at the prospect. All the beauty of Spring had vanished, and every green thing bore the marks of desolation—it looked like the 'gloom of Autumn.'"

GREAT RISE IN THE ALABAMA RIVER.—The Mobile Register of the 8th, states, on information received from passengers by the steamboat Choctaw, from Tuscaloosa, arrived the evening before, that the River at Lempolis had risen twenty-five feet, within a few days, and that it was rising when the boat left that place. Serious apprehensions were entertained for the Cotton and Corn planted on the bottom lands.

All the contents of the number for next month, of the American Quarterly Review, are printed, and the number will be issued without delay. The titles of the several articles are,—Art. 1. Washington and his Writings. 2. Life of Alexander Hamilton. 3. Italian Tragedy. 4. Cox on Quakerism. 5. Life and Writings of Robert C. Sands. 6. Black Hawk. 7. Decline of Poetry. 8. Paris and the Anniversary. 9. The Public Distress.

Colony of Pigeons.—A Susquehanna Pa. Co. paper mentions that immense numbers of Pigeons have taken possession of, and appropriated to their use, a territory said to be nine miles in length, and two miles in width; every foot of which, and almost every tree and branch of a tree upon it, are constantly occupied by them. It is presumable that the beech woods are indebted for this Pigeon visit, to the abundant crop of beach nuts this season.

Appointment.—We understand, says the Commercial, that Eli Moore, of this city, has been appointed by Gov. Marcy, to inspect and make a report to the Executive of the State, of the different prisons, at a per diem allowance of five dollars, and travelling expenses.

DEPARTURE OF MISSIONARIES.—The ship Corvo sailed on Wednesday, from Boston, for Bombay, having on board the Rev. Messrs. Graves and Munger, and Messrs. Hubbard and Abbott, and their wives, and also Miss Graves and Miss Kimball, all destined to the Mahratta Mission. Many persons assembled on the wharf to witness the impressive ceremony of embarkation.

Mr. Madison.—It will be gratifying to our readers to learn that Professor *Dunglisson*, on his return through Washington on Thursday from Montpelier, the seat of Mr. Madison, reported him to be in a rapid state of recovery.

New Manufacture.—We have before us two ladies hats called the "White Aspen," and they are very pretty light summer hats, as one would wish to see. The one is plain: the other an open diamond figure; and either is fit to grace the head of beauty. These new articles may be had of *Wm. P. Sloan*, 29 Stone Street.

Boston, May 21.—*The Hardest fend off.*—The ship Neponset was yesterday hauled upon the railway, and her cut water exhibits the effects of the tremendous power of the stroke of a whale. Capt. Hunt informs us that on his passage out to Canton on the 19th of last July, when sixty days from Boston, a sudden shock was felt by all on board, and that those who did not see the whale, supposed the vessel had struck a rock. It was in broad day, and the mate, who was steering at the time, saw the whale, and might have avoided it as well as not, but thinking to have a little sport, and not being apprehensive that there could be the least danger in giving him a gentle touch, kept straight on; he soon found out his mistake however, and came off second best, for the whale on being disturbed, gave a sudden turn, bringing his tail directly across the bows of the ship, carrying away a part of the cut-water, a piece of solid timber eight feet long and nearly a foot thick, breaking off a number of copper bolts as short and with as much ease as if they had been pipe stems, and doing some other inconsiderable damage. It was a large right whale, and in all probability if he had got a *fair lick*, as the boys say, for this was nothing but a gentle touch, he would have sent the vessel to the bottom. Capt. Hunt was obliged to repair as well as he could in Canton, and now the ship is on the rail-way, the effects of the encounter are plainly to be seen.

[*From the Western Carolinian of May* 17.]

Hard Times.—Corn is now worth one dollar per bushel in this place, and hard to get at that. It has never, but once, within our memory, been so high here. In 1817 it sold, we believe, as high as $1 25—but that was hardly as high as 50 cents now, if we take into consideration the redundancy of the circulating medium then, and its extreme scarcity at the present time. Many poor families are in a state of actual suffering, for they have not the "ways and means" of going any distance in search of grain; and those farmers in the country, who had it to spare, have already disposed of their surplus.

It is said that Corn may be had, as yet, in abundance, up the Yadkin. Those who have spare capital, would act, if not prudently, at least generously, by contributing something to collect a supply at this place to be distributed to the poor on such terms as would tend to alleviate distress without encouraging idleness.

The privilege of filling up Coffee House Slip and Old Slip, has been sold for two thousand seven hundred dollars, and the privilege of dumping dirt into them is retailed by the contractor at three cents a load. This at first seems more strange, than that servants should hire the privilege of tending in hotels. But when it is considered how great the quantity of dirt and rubbish is which must be taken away from the buildings which are pulling down, and the cellars which are digging in the lower part of the city, and that there is no other place of deposit for it within the distance of nearly two miles, the thing is accounted for.—[Jour. of Com.]

Accident.—The sloop Rising Sun, Capt. Bull, of Barnegat, whilst proceeding down the bay in a squall on Saturday afternoon, was struck by a heavy flaw of wind and capsized. Two of the hands were drowned. One of them was in the cabin at the time of the accident, and the Captain hoping to save his life, procured as soon as possible, an axe from a schooner hard by, with which he cut a hole into the cabin, but as soon as the air was admitted the sloop righted, and the poor fellow was irrecoverably lost. The sloop soon after drifted ashore on Robin's Reef, and on Sunday morning, when the Captain boarded her, he found that some rascals had in the night completely stripped her of rigging, blocks, &c.

Hudson, Columbia County, May 27.—The barque *Washington*, Captain Clark, left our docks on Tuesday afternoon last for the Pacific, in pursuit of the sperm whale. She was manned and furnished for three years. She sails on her second voyage. Our citizens have now eleven vessels in quest of the oily treasures in the prolific deep.

Criminal Outrage.—The church, called St. Mat thews, in Manchester village, on the west side of the Schuylkill, near this city, was entirely destroyed by fire on Saturday evening. There is not the slightest doubt that this conflagration was the work of an incendiary. There had been no fire in or near the building, for a long time.—[Philadelphia Commercial Intelligencer.]

The bill concerning gold and silver coins of the United States, and for regulating the value of foreign coins, passed the House of Representatives on Tuesday. The Senate will undoubtedly—supposing the provisions of the bill to be satisfactory, (of which, not having seen it, we have no means of judging)—speedily adopt it.

[*From the Arkansas Gazette, April* 30.]

Cholera—Little Rock.—Among the passengers who passed up on the steamboat Gallipolis, on Friday night last, were Lieuts. Chandler and Taylor, U. S. A., having in charge about 140 recruits for the 7th U. S. Infantry, at Fort Gibson, which have been recently enlisted in New York and other eastern ports. These recruits, we are sorry to say, were in a distressing situation when they passed here, the Cholera having made its appearance among them, and bidding fair to thin their ranks considerably. Six had died since they had left New Orleans—two on the day they arrived here, and upwards of 40 new cases reported same day.

The Helena Herald, of 24th instant, states that the steamboat Warren passed there on the 22d, bound up, having lost 10 or 12 passengers by cholera, between New Orleans and that place—one of which was Mr. B. Stowell, of Natchez.

The Cholera was still prevailing, with little or no abatement, among the Cherokee emigrants, encamped near the mouth of the Cadron, when we last heard from them. The number of deaths in the party, from all diseases, since they left Waterloc, on the Tennessee river, amounts to about 60—a fearful mortality in a party originally not exceeding 550 souls, in the short space of about two months. Every humane exertion within the control of Lieut. Harris, the conducting agent, has been used to alleviate the sufferings of the emigrants. One of the physicians, Dr. J. C. Roberts, employed by him to attend on the sick, was attacked by the disease, and died on Tuesday last; and Dr. John T. Fulton, the only other attending physician, was also seized with it last week, but, we are happy to learn, was convalescent and out of danger on Friday evening last. Another has since been employed from this county, who, we hope, may be more fortunate.

The disease also appears to be spreading along the river. A citizen of this county, Mr. Madison Taylor, died last week, about 15 or 20 miles above this place, and there was said to have been another in his family and one in the vicinity, both of which are convalescent. There have been several cases of the cholera at or near Pine Bluffs, within the last ten or fifteen days, and three or four blacks have died; but the disease had abated when the last steamboats left there.

For the information of our friends abroad, we have the pleasure of assuring them, that we have no case of the Cholera in town, nor in the vicinity, and that our citizens are as healthy as usual at this season of the year.

The Park.—The Corporation, some months since with a view to adorn this beautiful promenade, and to protect the areas from being invaded and trampled upon, made an appropriation for the purpose of purchasing handsomly turned Locust Posts and chains to enclose all the areas in a substantial manner.—The work and the materials were let out on contract to a gentleman who sent over a sample of the kind of chain required to England, and ordered enough to complete the enclosure of all the areas. They arrived a few days since, and a number have been passed through the turned posts, and present a rough, weak, and miserably insufficient appearance for the purpose intended. Some of them have since been broken and others will doubtless soon be broken by the boys and others resting on them, and the post holes will soon become so large as to let the chains down almost to the earth. The whole job, in short is most miserable executed. The reason for sending to England, the contractor says, is because he could, and did purchase these chains at 13 1-2 cents per pound, whereas when made in this country twice as good, they would cost 16 cents a pound and employ American mechanics. This is favoring American industry with a vengence and exhibits a desposition to disregard public feeling, which should meet with popular disapprobation.—[Daily Advertiser.]

Steamboat United States.—This splendid Boat proved herself an excellent sea vessel, by riding out in safety the tremendous gale that wrecked the Steamboat Oswego. Though encountering the full force of that storm, she was perfectly manageable, so much so that the passengers felt entirely safe. On her last trip down the Lake, she run from Niagara to Ogdensburg, (325 miles) including the usual stoppages at seven different ports, in thirty-five and a half hours. The last thirty-six miles was accomplished in two hours and forty-nine minutes. The Ogdensburg paper speaks in high terms of her popular Commander, Capt. R. J. Van Dewater.

P. S.—The United States will hereafter leave Ogdensburg at 9 o'clock, A. M. on Sundays, instead of 5 o'clock, P. M.—[Alb. Even. Jour.]

[The previous day's proceedings will be found in the *Extra.*]

A Novel Law Point.—The Supreme Court of Massachusetts, at its law session in Boston in March last, decided, that a grand-chi'd born eight months and a half after the death of his grand-father, is included in a bequest to grand-children "*living at his decease.*"

The London Weekly Despatch, in declining to publish a "Subaltern's Eulogy on a great Captain," takes occasion to remark, that they have but little respect for heroes, in the common acceptation of the term, but there have been great leaders, whose memory will be ever dear to freemen—such were

"Leonidas and Washington,
Whose every battle-field is holy ground,
Which breathes of nations saved—*not* worlds undone.
How sweetly on the ear such echoes sound!
While the mere victors may appal, or stun
The servile or the vain: such names will be
A watchword, till the future shall be free!"

[*From the Journal of Commerce.*]

Latest from Rio Janeiro.—By a decree of March 6th, government has granted to a company called "Nitheroy," the exclusive privilege, for ten years, of navigating the rivers and bays of the Province of Rio Janeiro *by Steam.* The Company, on their part, agree to establish steamboats on said bays and rivers, within 15 months from the date of the decree, under penalty of two contos of reis, to be paid to the public Treasury.

The Minister of the Home Department has addressed Circulars to the Presidents of several Provinces, stating that the government had received information of the existence of the Silk-Worm in those Provinces, and requiring them to investigate the matter, and "remit to the Secretary of State's a portion of balls of silk as made by the insect, if such are to be found," and also "every possible information as to where they are to be found, the shrubs or trees on which they feed, and whether they can be propagated with facility in houses." The Silk-Worm of Brazil is not exactly of the same species with that of Asia, being larger and of a more hardy nature. The Silk is said to be of an excellent quality.

Jose Aroncho de Toledo Rondon has been commissioned by the government to write a treatise upon the process of manufacturing Tea. It appears that this plant has been propagated to some extent in the Provinces of St. Paul's Nines, &c. and that it flourishes extremely well. It was introduced into St. Paul's by the gentleman above named, whose plantation in 1829 contained upwards of 30,000 plants.

Rio Janeiro, April 5th.—The horizon of our political world bears a more favorable aspect than it has done for some time past; the reports from the Presidents of the different Provinces to the Regency, and the numerous felicitations received from the several municipalities, all announce that tranquility is firmly restored in all the Provinces, except that the insurrection of Panellas and Jaquipe has not yet been quelled; but as troops from all directions have marched against the insurgents, they cannot stand out long; several persons implicated have been taken and sent to the Island of Fernando Noronha.

The long continuance of dry weather has much injured the crops in the Minas districts generally, and reduced the towns of Diamantina and Principe to absolute starvation; happily the rains which have lately fallen, and the liberal subscription made by the inhabitants of this city, both natives and foreigners, whose names have been published, amounting to near Rs. 30,000,000, and measures adopted by government, have greatly relieved the unfortunate sufferers.

[*From the Journal of Commerce.*]

A NEW CONTINENT.—It will be recollected that a year or two ago, a paragraph was put forth by the London Literary Gazette, if we recollect right, and extensively copied, stating that a large body of land had been discovered somewhere to the Southward of the Cape of Good Hope. There was however a great lack of details, for want of which, as well as the extraordinay character of the discovery, many were inclined to regard it with incredulity. We now have the long sought details.

INTERESTING TO THE WORLD AT LARGE.

[*From the Tasmanian of Hobart Town, dated October* 11, 1833.]

Most of our readers will recollect that about 18 months since, Capt. Briscoe, of the brig Tula, brought his vessel to this port for repairs. It will also be fresh in the memory of many, that some of our public writers pretended to doubt the authenticy of Capt. Briscoe's statement—viz, that he was then on an expedition, at the cost of a London mercantile house; indeed, in this very journal, the epithet "piratical" was more than once repeated when referring to the Tula and Lively. At the time Captain Briscoe was with us, it became pretty generally understood that a discovery of land of some importance had been made, but as great pains were taken to keep the situation a secret, the various reports circulated, of course, were only surmises of those who pretended to be more knowing than their neighbors. The following extract, however, will disclose the secret, which was so well kept by the enterprizing crews of the two little vessels.

"The discovery of the land towards the South Pole, made by Captain Briscoe, in the brig Tula, accompanied by the cutter Lively, both vessels belonging to Messrs. Enderby, extensive owners of ships in the whale fishing, has been communicated to the Royal Geographical Society.

"It is supposed that this land forms a part of a vast Continent, extending from about longitude 47—31 east, to longitude 69—29 west, or from the longitude of Madagascar round the whole of the Southern or South Pacific Ocean, as far as the longitude of Cape Horn. On the 28th February, 1832, Captain Briscoe discovered land, and during the following month remained in the vicinity; he clearly discovered the black peaks of mountains above the snow, but he was, from the state of the weather, and the ice, unable to approach nearer than about 30 miles. The Stormy Petros was the only bird seen, and no fish. It has been named Enderby's Land, longitude 47 31 E. latitude 66—36 S. An extent of about 360 miles was seen. The range of mountains E. S. E.

'In consequence of the bad state of the health of the crew, Capt. Briscoe was compelled to return into warmer latitudes. He wintered at Van Diemen's Land, and was rejoined by the cutter, from which he was separated by the stormy weather, in the high south latitudes.

"In October, 1831, he proceeded to New Zealand. In the beginning of February, 1832, he was in the immediate neighborhood of an immense iceberg, when it fell to pieces, accompanied by a tremendous noise.

"On the 4th of the same month, land was seen to the S. E. longitude 69—29, latitude 67—15. It was found to be an island, near to the head land, of what may be hereafter called the Southern continent. On the island, about four miles from the shore, was a high peak (and some smaller ones,) about one third of its height was covered with a thin scattering of snow, and two thirds completely with snow and ice. The appearance of the peaks was peculiar; the shape was conical, but with a broad base.

"This island has been named Adelaide Island, in honor of her Majesty. Mountains were seen to the South at a great distance inland, supposed about 90 miles. On 21st February, 1832, Captain Briscoe landed in a spacious Bay on the main land, and took possession in the name of his Majesty William IV. The appearance was one of utter desolation, there being no vestige whatever of animal or vegetable life. In future, this part of the continent, if such it prove, will be known as Graham's Land."—[Sydney Monitor.]

FOREIGN ITEMS.

The Prince *de Ligne*, the Duke *d' Ursel*, and others whose houses were sacked by the Brussels mob, had arrived at Paris.

M. Barbé Marbois, at the age of 90, retires from the Presidency of the *Cour des Comptes*, and is succeeded by *M. Barthe*, created for that purpose a Peer of France.

Mr. Livingston, our Minister to Paris, had interviews with the King on the 3d and 5th ult., both after the rejection of the indemnity.

FRENCH TREATY.—The following article from the National Gazette, shews that we have no reason to expect any reconsideration of the vote in the French Chamber of Deputies, rejecting the American indemnity—no such usage existing in that body. At the next session, we entertain little doubt of a different result.

A French friend has sent us the following note, which possesses interest in regard to the fate of the Treaty with France:

"The answer to your inquiries about the reconsideration of votes, is more easy than I at first supposed. Annexed, you have the text of two articles of the Charter, as revised in 1830, after the Revolution.

"'Art. 15. The right of proposing laws belongs to the King, to the Chamber of Deputies, and to the Chamber of Peers. However, all revenue laws must be voted first by the Chamber of Deputies.'

"'Art. 17. If a proposition of a Law has been rejected by one of the three branches, it cannot be brought up again (représenté) during the same session.'

"As for what is called *reconsideration of a vote*, that is, voting again in the same session, upon a question decided when the proper number of Deputies (the Quorum) has been present at the vote, it is altogether unknown in our legislative assemblies, at least since the famous Convention, who never having consulted anything but their arbitrary and despotic will, often treated their own decrees as they had dealt with most of the sacred laws of humanity."

Population of Great Britain.—There has just been printed in two volumes folio, an "Enumeration Abstract" of the population of Great Britain for 1831, made from the returns and answers forwarded from each parish in England and Scotland, pursuant to an act of Parliament.

Population of England and Wales, from the year 1700 to the year 1830, including the army and navy, and merchant seamen.

1700—5,134,516	1750—6,039,648	1800—9,187,176
1710—5,066,337	1770—7,227,586	1810—10,407,556
1820—5,345,351	1780—7,814,827	1820—11,957,505
1830—5,687,903	1790—8,540,736	1830—13,840,851
1740—5,829,705		

The population of Ireland amounted to 7,767,401.

The increase of Great Britain since 1801, has always been about one a half per cent. per annum.

The comparative proportion of families stands as follows in centesimal parts.

	Agriculture.	Trade, &c.	Others.	Total.
G. Britain	1811—35	44	21	100
	1821—33	46	31	100
	1831—28	42	30	100

Thus trade and manufactures appear to have somewhat increased between 1811 and 1821, agriculture to have somewhat declined; but between 1821 and 1831, the proportion of families employed in trade receded from 46 to 42 per cent. and the agricultural population from 33 to 28 per cent.

Summary of Great Britain.

	1801	1811	1821	1831
England,	8,331,434	9,551,888	11,261,437	13,191,005
Wales,	541,546	611,788	717,438	806,182
Scotland,	1,599,061	1,805,588	2,093,456	2,365,114
Army, Navy,	470,598	640,530	319,300	277,017
	10,942,646	12,609,864	14,391,631	16,539,318

Error Corrected.—In noticing a great assemblage of the Trades Unions in London, who met to petition the King for a commutation of the punishment of some *Unionists* condemned to transportation, we stated the number of the procession at 200,000, while in fact it did not, we find, exceed 30,000. Our mistake arose from the following paragraph in the Times of the 21st, the day before the meeting:

An absurd notion has got hold of those "Trades' Unionists," that notwithstanding their multitudinous meeting, and their alarming and most inconvenient and troublesome procession, their petition must, as a matter of course, be received at Whitehall, provided only that the entire mass of 200,000 petitioners abstain from breaking bodily into the Home-office, and content themselves with sending a small detachment of their numerous army to present it. Now, we can inform them that so clumsy and wretched an expedient will not serve the purpose.

Steam v. the Turn-outs.—The turn-out of the Lancashire workmen in the building trade has introduced a curious application of the steam-engine. This machine is now employed, instead of manual labor, in hoisting building materials to the top of the edifice where they are intended to be used. The Liverpool Custom-house is at the present moment rising into existence by the assistance of a steam-engine, which raises sixteen thousand bricks *per diem*, with seven or eight tons of mortar, and at the same time mixes the mortar below.

ROYAL STATUTE—ESTATUTO REAL.

For the Convocation of the General Cortes of the Kingdom of Spain.

Art. I.—In conformity to the provisions of the law 5th, chap. 15th, part 2d, and the law 1st and 2d, chap. 7th, book the 6th of the new Constitution, her Majesty, the Queen Governor, in the name of her august daughter Donna Maria II, has resolved to convoke the General Cortes of the Kingdom.

Art. II.—The General Cortes shall be composed of two *Estamentos* (Estates), viz., of the *Proceres* (Peers) of the Realm, and of the *Procuradores* (Deputies) of the Kingdom.

CHAPTER II.

Of the Estamento of the Peers of the Realm.

Art. III.—The *Estamento* of Peers of the Realm shall be composed—

1. Of the Most Reverend Archbishops, and of the Most Reverend Bishops.
2. Of the Grandees of Spain.
3. Of the *Titulos* of Castile.
4. Of an undetermined number of Spaniards, elevated in dignity and illustrious by their services in various careers, who shall or may have been Secretaries of State, Ambassadors, or Ministers Plenipotentiary, Generals of the Navy or Army, or Judges of the Supreme Tribunals.
5. Of the territorial proprietors and chief partners in manufacturing companies, or mercantile establishments, which shall be found to unite to personal merit, and other corresponding circumstances, the possession of an annual income of 70,000 reals, and have been previously Deputies of the Kingdom.
6. Of those who as public teachers or cultivators of science and literature, have acquired renown and celebrity, and who also possess an annual income of 70,000 reals, whether derivable from private property or a salary paid by the State.

Art. IV.—It shall be sufficient to be Archbishop, or Bishop Elect, or Bishop Auxiliary, to be eligible in that class, and to take a seat in the *Estamento* of the Peers of the Realm.

Art. V.—All the Grandees of Spain belong by birth to the *Estamento* of Peers of the Realm, and shall take their seats accordingly, contingent only upon the following conditions—

1. That they shall be 25 years of age complete.
2. That they be possession of the Grandeeship, and hold it in their own right.
3. That they shall have an annual income of 200,000 reals.
4. That their estates shall not be subject to any kind of mortgage.
5. That they are not under criminal process.
6. That they are not the subjects of any other Power.

Art. VI.—The dignity of Peer of the realm is hereditary in the Grandees of Spain.

Art. VII.—The Sovereign shall elect and name the other Peers of the realm whose dignity shall be for life.

Art. VIII.—The *Titulos* of Castile, who may be named Peers of the realm, shall prove that they possess the following qualifications:

1. That they are 25 years of age.
2. That they are in possession of the *Titulo* of Castile, and hold it in their own right.
3. That they are in the receipt of an income of 80,000 reals.
4. That their estates are not subject to any kind of mortgage.
5. That they are not under criminal process.
6. That they are not the subjects of any foreign Power.

Art. IX.—The number of Peers of the realm is unlimited.

Art. X.—The dignity of Peer of the realm shall be forfeited only in case of legal incapacity, or in virtue of a sentence by which an infamous punishment may be awarded.

Art. XI.—It is reserved to future regulations to determine all that concerns the interior proceedings and mode of deliberating in the *Estamento* of the Peers of the realm.

Art. XII.—The Sovereign shall elect from the Peers of the realm, whenever the Cortes are convoked, those who are to exercise, during the period of that Session, the offices of President and Vice-President of the said *Estamento*.

CHAPTER III.

Of the Estamento or Procuradores or Deputies of the Kingdom.

Art. XII.—The *Estamento* of the Deputies of the kingdom shall be composed of the persons to be chosen according to the law of elections.

Art. XIV.—To be a Deputy of the kingdom it will be necessary—

1. To be a native of those kingdoms, or the son of Spanish parents.

2. To be of 30 years of age completed.

3. To be in possession of an income of 12,000 reals yearly.

4. To have been born in the province for which the Deputy is named, or to have resided in it for two previous years, or to possess in it some property either in town or country, which shall produce half the rent necessary to be a Deputy of the kingdom. In case any individual should be elected a Deputy to the Cortes for more than one province, he shall have the right to choose between those by whom he shall be named.

Art. XVI.—The following cannot serve as Deputies of the Kingdom—

1. Those who have been proceeded against criminally.

2. Those who have been condemned by a tribunal to an infamous punishment.

3. Those who have any natural physical incapacity, notorious or permanent.

4. Those traders who are declared in a state of insolvency, or who have suspended their payments.

5. Proprietors whose estates are mortgaged.

6. Debtors to the public Treasury, in quality of indirect contributors.

Art. XVI.—The Deputies of the Kingdom shall act in conformity to the powers with which they shall have been invested at the time of their election, as prescribed by the Royal Decree of Convocation.

Art. XVII.—The duration of the powers of the Deputies of the Kingdom shall be for three years, except when the Sovereign shall dissolve the Cortes before the expiration of that time.

Art. XVIII.—When a new election shall be proceeded in, whether in consequence of the powers having expired, or that the Sovereign shall have dissolved the Cortes, those who have been Deputies of the Kingdom may be re-elected, provided they still fulfil the conditions required by the laws.

CHAPTER IV.

Of the Meeting of the Estamento of the Deputies of the Kingdom.

Art. XIX.—The Deputies of the kingdom shall meet in the place designated by the Royal Decree of Convocation for the celebration of the Cortes.

Art. XX.—The Cortes themselves shall enact rules for determining the form of verification, of the powers of Members.

Art. XXI.—When the powers of the Deputies of the kingdom shall be determined, they will proceed to elect five from among themselves, from whom the Sovereign will select the two who are to act as President and Vice President.

Art. XXII.—The President and Vice President of the Estamento of the Deputies of the kingdom shall cease their functions when the Sovereign shall suspend or dissolve the Cortes.

Art. XXIII.—The regulations shall determine every thing relative to the interior proceeding and the mode of deliberating in the *Estamento* of the Deputies of the kingdom.

CHAPTER V.

General Provisions.

Art. XXIV.—To the Sovereign shall exclusively belong the right of convoking, suspending, and dissolving the Cortes.

Art. XXV.—The Cortes shall be assembled in virtue of the Royal Convocation, in the place, and on the day therein named.

Art. XXVI.—The Sovereign shall open and close the Cortes either in person or by commission.

Art. XXVII.—In observance of the law 5th, chapter 15th, part 2d, the Cortes shall be convoked after the death of the King, in order that his successor shall swear to the observance of the law, and receive from the Cortes the necessary oaths of fidelity and obedience.

Art. XXVIII.—Likewise the general Cortes of the kingdom shall be assembled in virtue of the said law, when the Prince or Princess who may be heir to the Crown shall not be of age.

Art. XXIX.—In the case expressed in the preceding article, the Guardian of the minor King shall swear in the Cortes loyally to watch over the safe keeping of the Prince, and not to violate the laws of the State, receiving from the Peers of the realm, and the Deputies of the kingdom, the necessary oaths of fidelity and obedience.

Art. XXX.—In observance to law 2d, chap. 7th, book 6th, of the New Compilation, the Cortes of the kingdom shall be convoked when any difficult circumstances occur, the weight of which may require their counsel.

Art. XXXI.—The Cortes shall not have the right to deliberate upon any subject which shall not be submitted expressly to their examination in virtue of a Royal decree.

Art. XXXII.—This article shall be without prejudice to the right which always has been exercised by the Cortes of *offering petitions to the Sovereign*, making use of the form and mode which shall be prescribed in the decree.

Art. XXXIII.—In order to constitute a law there shall be required the approbation of one and the other *Estamento*, and the sanction of the Sovereign.

Art. XXXIV.—In conformity to the law, 1st, chap. 7th, book 6th of the New Compilation, neither taxes nor contributions of any class whatsoever shall be imposed without having been proposed by the Sovereign and voted by the Cortes.

Art. XXXV.—No taxes shall be imposed for more than the space of two years, before the expiration of which period they should be voted anew by the Cortes.

Art. XXXVI.—Before voting in the Cortes the taxes which are about to be imposed, the respective Secretaries of State shall present a statement, in which shall be set out the condition of the several branches of the public Administration; after which the Minister of Finance shall have to propose to the Cortes an *expose* of the expenditure, and the mode by which it is proposed to be met.

Art. XXXVII.—The Sovereign shall suspend the Cortes by virtue of a decree signed by the President of the Council of Ministers, and immediately upon the reading of said decree, both the *Estamentos* will rise, and not resume their sittings or exercise any further deliberation.

Art. XXXVIII.—In case the Sovereign suspends the Cortes they cannot be reunited, but in virtue of a new Decree of Convocation.

Art. XXXIX.—On the day which shall be appointed for the meeting of the Cortes the said Deputies of the kingdom shall assemble in them, except in such cases where the term of three years, during which their powers are given, shall have expired.

Art. XL.—When the King dissolves the Cortes, it is done either in person or by means of a decree, countersigned by the President of the Council of Ministers,

Art. XLI.—In either one or the other case both *Estamentos* shall separate immediately.

Art. XLII.—The order for the dissolution of the Cortes being announced, the *Estamento* of the Peers of the realm cannot be reunited or enter into any resolutions, except, in virtue of a new Convocation the Cortes shall be reassembled.

Art. XLIII.—When the order of the Sovereign dissolves the Cortes, the powers of the Deputies of the kingdom are annulled by the same act.

Art. XLIV.—All that may be done or determined afterwards is null and void.

Art. XLV.—When the Cortes shall be dissolved others shall be called before the expiration of one year.

Art. XLVI.—When the Cortes are convoked, at the same time are to be convoked both the one and the other *Estamento*.

Art. XLVII.—One *Estamento* cannot be assembled without the other.

Art. XLVIII.—Each *Estamento* shall hold its Sessions in separate Chambers.

Art. XLIX.—The Sessions of both the one and the other Estate shall be public, except in those cases where the regulations shall point out.

Art. L.—The Peers of the realm as well as the Deputies of the kingdom shall not be held responsible for the opinion and votes which they may give in discharge of their duty.

Art. LI.—The regulations of the Cortes shall determine the relations of the one and the other *Estamento* as well as reciprocally between themselves as well as respect to the Government.

(Signed) FRANCISCO MARTINEZ DE LA ROSA,
NICHOLAS MARIA GARELLY,
ANTONIO RENON ZARCO DEL VALLE,
JOSE VASQUEZ FIGUERA,
JOSE DE IMAZ,
JAVIER DE BURGOS.

[FOR THE NEW YORK AMERICAN.]

MR. EDITOR.—The writer, acting on the suggestion of your Western Correspondent, has attempted to versify what was poetry before. He cannot claim the credit of giving the lines a "happier dress," but, albeit, not a *poetical friend* of you or any body else, he delights in simple rhyme, and has tried to retain that quality in the following—

INDIAN SERENADE

In imitation of the original prose translation, made by Mr. H.

Bud of the forest, now shut in thy bower,
Rise from the leaves swelling round thee, a flower!
Beautiful bird of the prairie awake!
Powerless the hawk is, and charmless the snake.

Thou with the eyes of the fawn, give to me
Wild, timid glances, and draw me to thee:
Warm are thy looks, and the joy they disclose
Gladdens my heart, as the dew drop the rose.

Sweet is thy breath as the sigh of the south;
Sweet as the store of the bee tree thy mouth:
Sweet is thy voice as the music of rain
That lulls the roun'd hunter to slumber again!

When the snows melt, and the maple trees run
How the springs murmur, and swell to the sun!
So towards thee swells my blood with delight;
So, too, I murmur to silence, all night.

When with mild passion thy bosom is mov'd,
How my heart sings unto thee my belov'd!
So, in the moon of red berries, awake
Breezes, and sing to the leaves as they shake.

If thou art sad, and art sighing the while,
Dark is my heart and uncertain my smile!
Like the bright river that bears on its breast
Sunset, made dim by a cloud in the west.

Morning's red ray, as it shines on the lake,
Brightens the ripples that night breezes make;
So, when thou smilest, the gloom that before
Clouded my spirit, surrounds me no more.

Wake and behold me, beloved and best!
Blood of my heart! come and live in my breast!
Heaven, earth, water, are smiling around:
I alone sadly look up from the ground. R. I.

[FOR THE NEW YORK AMERICAN.]

THE BRIDEMAID'S GRAVE.

*Lines suggested by the recent death of Miss M******* C***, of Utica, N. Y.*

"And then I think of one, who in her youthful beauty died,
The fair meek blossom that grew up, and faded by my side."

Where the tender osier's wave,
And soft winds sweep,
We will make her gentle grave,
And mein'ries keep—
There the stainless virgin Rose,
And Violet,
Will their balmy lids unclose,
With tears wet—
Such as solemn Evening flings
On Lillies fair,
While each bell in fragrance rings
For spirit pray'r.
With the bridal-chaplet bound,
Still on her brow,
We will "lay her in the ground,"
Afar from woe. M.

New York, May 24th.

[*From the Youth's Sketch Book.*]

THE LITTLE BOAT BUILDERS.

Beside the sea-shore Charles and Ben
Sat down, one summer day,
To build their little boats—and then
To watch them sail away.

'Hurrah!' the boats have left the shore,
And side by side they sail;
And pleasant sunshine all before,
Behind, the summer gale.

But all too rough the sunny sea;—
One boat upsets—and then
They clap their hands and shout with glee,
"Hurrah! she's up again."

But on the wave it cannot live;
It sinks:—and now the other!
And now a louder shout they give,
'Hurrah! we'll build another!'

'Let's make ourselves a little sea—
The ocean is too large;
This tub will do for you and me
To sail our little barge.'

Dear children! thus through life your joys
May vanish! Will you then
Still laugh as o'er your childish toys,
And think they'll rise again?

And when life's ocean seems too wide
Your quiet course to trace,
Say will you wisely turn aside,
And choose a humbler place?

And will you, as your joy's decay,
First one, and then the other,
Shout on, as one hope sinks away,
'Hurrah! I'll build another!'

TIME.

On! on; still on! the bell of Time tolls on
Its unregarded toesin to the ear;
On! on! the stream of Time, that long hath gone
O'er crown and crook, o'er banquet and o'er bier,
Rolls by; whilst on its banks we sport and play,
Reckless of rising floods. Years disappear,
And kindred vanish; yet the heedless mind
Can see no warning in the leaf that falls—
Can note no promise in the buds that bind
New thrones in old woods—when the exultant calls
Its spring *revenit*. Still we chase away
The omen from our breast, and shut our sight
To the hand-writing on the wall, while night
Blots out the *idle labors* of the day!

Canal Tolls.—The tolls collected upon the New York Canals, for the week ending on the 14th May, amount to the sum of *forty-six thousand five hundred and thirty-three dollars and twenty-eight cents.* The total amount collected during the four weeks ending on the 14th instant, is $195,018 57.—[Alb. Argus.]

☞ **TOWNSEND & DURFEE,** of Palmyra, *Manufacturers of Railroad Rope,* having removed their establishment to Hudson, under the name of *Durfee, May & Co.* offer to supply Rope of any required length (without splice) for inclined planes of Railroads at the shortest notice, and deliver them in any of the principal cities in the United States. As to the quality of Rope, the public are referred to J. B. Jervis, Eng. M. & H. R. R. Co., Albany; or James Archibald, Engineer Hudson and Delaware Canal and Railroad Company, Carbondale, Luzerne county, Pennsylvania.

Hudson, Columbia county, New-York, January 29, 1833.

NOTICE TO MANUFACTURERS.

☞ **SIMON FAIRMAN,** of the village of Lansingburgh, in the county of Rensselaer, and state of New-York, has invented and put in operation a Machine for making Wrought Nails with square points. This machine will make about sixty 6d nails, and about forty 10d nails in a minute, and in the same proportion larger sizes, even to spikes for ships. The nail is hammered and comes from the machine completely heated to redness, that its capacity for being clenched is good and sure. One horse power is sufficient to drive one machine, and may easily be applied where such power for driving machinery is in operation. Said Fairman will make, vend and warrant machines as above, to any persons who may apply for them as soon as they may be made, and on the most reasonable terms. He also desires to sell one half of his patent right for the use of said machines throughout the United States. Any person desiring further information, or to purchase, will please to call at the machine shop of Mr. John Humphrey, in the village of Lansingburgh.—August 15, 1833. A29 tf RM&F

TO IRON MANUFACTURERS AND OWNERS OF IRON ORE BEDS.

JOSEPH GOULDING, of Keeseville, Essex county, N. Y., has invented and patented a *Magnetic Separating Machine,* for separating Iron Ore from the extraneous matter usually found in connection with it; and he begs leave to recommend it to the especial notice of owners of Ore Beds as possessing qualities of great importance, as by the use of it many ore beds can be made very valuable, it being applicable in all cases when the Ore is magnetic.

The quality of the iron made is much improved by the process of separation, indeed good iron can, after separation, be made from ore which would without it be considered not worth working. There is also found to be a great saving in the transportation of ore, and in time and fuel required to work the same into Iron.

Mechanics can be furnished at short notice which will separate from half a ton to twenty tons each in twenty-four hours.

J. Goulding also manufactures to order, *Cylindrical Forge and Blast Furnace Bellows,* of the most improved construction, and which are successfully used in nearly all the Forges and Furnaces in Clinton and all the adjoining counties.

January 20th, 1834. M 14tf

RAILWAY IRON.

☞ Ninety-five tons of 1 inch by ¾ inch,
200 do. 1¼ do. ¾ do.
40 do. 1½ do. ¾ do.
800 do. 2 do. ¾ do.
800 do. 2½ do. ¾ do.
soon expected.

Flat Bars in lengths of 14 to 16 feet counter sunk holes, ends cut at an angle of 45 degrees with splicing plates, nails to suit.

250 do. of Edge Rails of 36 lbs. per yard, with the requisite chairs, keys and pins.

Wrought Iron Rims of 30, 33, and 36 inches diameter for Wheels of Railway Cars, and of 60 inches diameter for Locomotive wheels

Axles of 2⅛, 2⅜, 2⅝, 3, 3⅓, 3½, and 3¾ inches diameter for Railway Cars and Locomotives of patent iron.

The above will be sold free of duty, to State Governments and Incorporated Governments, and the Drawback taken in part payment.

A. & G. RALSTON.
9 South Front street, Philadelphia.

Models and samples of all the different kinds of Rails, Chairs, Pins, Wedges, Spikes, and Splicing Plates, in use, both in this country and Great Britain, will be exhibited to those disposed to examine them. d71meowr

ALBANY SEED-STORE AND HORTICULTURAL REPOSITORY.

The subscriber having resumed the charge of the above establishment, is now enabled to furnish traders and others with FRESH GARDEN SEEDS, upon very favorable terms, and of the growth of 1833, *warranted* of the best quality.

The greatest care and attention has been bestowed upon the growing and saving of Seeds, and none will be sold at this establishment excepting those raised expressly for it, and by experienced seedsmen; and those kinds imported which cannot be raised to perfection in this country; these are from the best houses in Europe, and may be relied upon as genuine.

It is earnestly requested whenever there are any failures hereafter, they should be represented to the subscriber; not that it is possible to obviate unfavorable seasons and circumstances, but that satisfaction may be rendered and perfection approximated.

Also—French Lucern, White Dutch Clover, White Mulberry Seed, genuine Mangel Wurtzel, Yellow Locust, Ruta Baga, and Field Turnip Seeds, well worth the attention of *Farmers.*

W. THORBURN,
347 N. Market st. (opposite Post Office.)

☞ Catalogues may be had at the Store; if sent for by mail, will be forwarded gratis. Orders solicited early, as the better justice can be done in the execution.

*** Mr. Thorburn is also Agent for the following publications, to wit:—

New York Farmer and American Gardener's Magazine.

Mechanics' Magazine and Register of Inventions & Improvements.

American Railroad Journal and Advocate of Internal Improvements; and the

New-York American, *Daily, Tri-Weekly,* and *Semi-Weekly; either* or *all* of which may be seen and obtained by those who wish them by calling at 347 *North Market street, Albany.*

LOCOMOTIVE ENGINES.

☞ THE AMERICAN STEAM CARRIAGE COMPANY, OF PHILADELPHIA, respectfully inform the public, and especially Railroad and Transportation Companies, that they have become sole proprietors of certain improvements in the construction of Locomotive Engines, and other railway carriages, secured to Col. Stephen H. Long, of the United States Engineers, by letters patent from the United States, and that they are prepared to execute any orders for the construction of Locomotive Engines, Tenders, &c. with which they may be favored, and pledge themselves to a punctual compliance with any engagements they may make in reference to this line of business.

They have already in their possession the requisite apparatus for the construction of three classes of engines, viz. engines weighing four, five, and six tons.

The engines made by them will be warranted to travel at the following rates of speed, viz. a six ton engine at a speed of 15 miles per hour; a five ton engine at a speed of 18 miles per hour; a four ton engine at a speed of 22 1-2 miles per hour. Their performance in other respects will be warranted to equal that of the best English engines of the same class, with respect not only to their efficiency in the conveyance of burthens, but to their durability, and the cheapness and facility of their repairs.

The engines will be adapted to the use of anthracite coal, pine wood, coke, or any other fuel hitherto used in locomotive engines.

The terms shall be quite as favorable, and even more moderate, than those on which engines of the same class can be procured from abroad.

All orders for engines, &c. and other communications in reference to the subject, will be addressed to the subscriber, in the city of Philadelphia, and shall receive prompt attention.

By order of the Company,
WILLIAM NORRIS, Secretary.

December 2d, 1833.

For further information on this subject see No. 49, page 772 of this Journal. dc

RAILROAD TURNOUTS, REVOLVING PLATFORMS AND SIDELINGS.

The subscriber having been for some years engaged in constructing turnouts, and inserting the necessary switches and fixtures appertaining to the same, on the Baltimore and Ohio Railroad,—and as those works on that road will be shortly completed, he is desirous of being employed by any Railroad Company requiring work of the above description.

He will either contract at a fixed price to execute the work, he providing all the necessary materials and fixtures, or otherwise,—or he will engage himself at a stated salary.

In relation to his abilities and general character he begs to refer any Company, disposed to engage him, to the Baltimore and Ohio Railroad Company.

Letters can be addressed to him at the Office of Construction Baltimore and Ohio Railroad, Baltimore.

a26 6t REUBEN ALER.

SURVEYORS' INSTRUMENTS.

☞ Compasses of various sizes and of superior quality warranted.

Leveling Instruments, large and small sizes, with high magnifying powers with glasses made by Troughton, together with a large assortment of Engineering Instruments, manufactured and sold by E. & G. W. BLUNT, 154 Water street, J31 6t corner of Maidenlane.

ENGINEERING AND SURVEYING INSTRUMENTS.

☞ The subscriber manufactures all kinds of Instruments in his profession, warranted equal, if not superior, in principles of construction and workmanship to any imported or manufactured in the United States; several of which are entirely new: among which are an Improved Compass, with a Telescope attached, by which angles can be taken with or without the use of the needle, with perfect accuracy—also, a Railroad Goniometer, with two Telescopes—and a Levelling Instrument, with a Goniometer attached, particularly adapted to Railroad purposes.

WM. J. YOUNG,
Mathematical Instrument Maker, No. 9 Dock street, Philadelphia.

The following recommendations are respectfully submitted to Engineers, Surveyors, and others interested.

Baltimore, 1832.

In reply to thy inquiries respecting the instruments manufactured by thee, now in use on the Baltimore and Ohio Railroad. I cheerfully furnish thee with the following information The whole number of Levels now in possession of the department of construction of thy make is seven. The whole number of the "Improved Compass" is eight. These are all exclusive of the number in the service of the Engineer and Graduation Deparment.

Both Levels and Compasses are in good repair. They have in fact needed but little repairs, except from accidents to which all instruments of the kind are liable.

I have found that thy patterns for the levels and compasses have been preferred by my assistants generally, to any others in use, and the Improved Compass is superior to any other description of Goniometer that we have yet tried in laying the rails on this Road.

This instrument, more recently improved with a reversing telescope, in place of the vane sights, leaves the engineer scarcely any thing to desire in the formation or convenience of the Compass. It is indeed the most completely adapted to lateral angles of any simple and cheap instrument that I have yet seen, and I cannot but believe it will be preferred to all others now in use for laying of rails—and in fact, when known, I think it will be as highly appreciated for common surveying.

Respectfully thy friend,
JAMES P. STABLER, Superintendant of Construction of Baltimore and Ohio Railroad.

Philadelphia, February, 1833.

Having for the last two years made constant use of Mr. Young's "Patent Improved Compass," I can safely say I believe it to be much superior to any other instrument of the kind, now in use, and as such most cheerfully recommend it to Engineers and Surveyors. E. H. GILL, Civil Engineer.

Germantown, February, 1833.

For a year past I have used Instruments made by Mr. W. J. Young, of Philadelphia, in which he has combined the properties of a Theodolite with the common Level.

I consider these Instruments admirably calculated for laying out Railroads, and can recommend them to the notice of Engineers as preferable to any others for that purpose.

HENRY R. CAMPBELL, Eng. Philad., Germant. and Norrist. Railroad

m1 1y

STEPHENSON,

Builder of a superior style of Passenger Cars for Railroads

No. 264 Elizabeth street, near Bleecker street, New-York.

☞ RAILROAD COMPANIES would do well to examine these Cars; a specimen of which may be seen on that part of the New-York and Harlæm Railroad, now in operation.

J25 tf

RAILROAD CAR WHEELS, BOXES AND AND OTHER RAILROAD CASTINGS.

☞ Also, AXLES furnished and fitted to wheels complete at the Jefferson Cotton and Wool Machine Factory and Foundry, Paterson, N. J. All orders addressed to the subscribers at Paterson, or 60 Wall street, New-York, will be promptly attended to. Also, CAR SPRINGS.

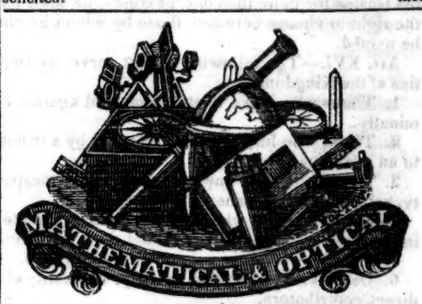
Also, Flange Tires turned complete.

J8 ROGERS, KETCHUM & GROSVENOR.

NOVELTY WORKS,

Near Dry Dock, New-York.

☞ THOMAS B. STILLMAN, Manufacturer of Steam Engines, Boilers, Railroad and Mill Work, Lathes, Presses, and other Machinery. Also, Dr. Nott's Patent Tubular Boilers, which are warranted, for safety and economy, to be superior to any thing of the kind heretofore used. The fullest assurance is given that work shall be done well, and on reasonable terms. A share of public patronage is respectfully solicited. m19



INSTRUMENTS.

SURVEYING AND NAUTICAL INSTRUMENT MANUFACTORY.

☞ EWIN & HEARTTE, at the sign of the Quadrant, No. 53 South street, one door north of the Union Hotel, Baltimore, beg leave to inform their friends and the public, especially Engineers, that they continue to manufacture to order and keep for sale every description of Instruments in the above branches, which they can furnish at the shortest notice, and on fair terms. Instruments repaired with care and promptitude.

For proof of the high estimation on which their Surveying Instruments are held, they respectfully beg leave to tender to the public perusal, the following certificates from gentlemen of distinguished scientific attainments.

To Ewin & Hearte.—Agreeably to your request made some months since, I now offer you my opinion of the Instruments made at your establishment, for the Baltimore and Ohio Railroad Company. This opinion would have been given at a much earlier period, but was intentionally delayed, in order to afford a longer time for the trial of the Instruments, so that I could speak with the greater confidence of their merits, if such they should be found to possess.

It is with much pleasure I can now state that notwithstanding the Instruments in the service procured from our northern cities are considered good, I have a decided preference for those manufactured by you. Of the whole number manufactured for the Department of Construction, to wit: five Levels, and five of the Compasses, not one has required any repairs within the last twelve months, except from the occasional imperfection of a screw, or from accidents, to which all Instruments are liable

They possess a firmness and stability, and at the same time a neatness and beauty of execution, which reflect much credit on the artists engaged in their construction.

I can with confidence recommend them as being worthy the notice of Companies engaged in Internal Improvements, who may require Instruments of superior workmanship.

JAMES P. STABLER,
Superintendent of Construction of the Baltimore and Ohio Railroad.

I have examined with care several Engineers' instruments of your Manufacture, particularly Spirit levels, and Surveyor's Compasses; and take pleasure in expressing my opinion of the excellence of the workmanship. The parts of the levels appeared well proportioned to secure facility in use, and accuracy and permanency in adjustments.

These instruments seemed to me to possess all the modern improvement of construction, of which so many have been made within these few years; and I have no doubt but they will give every satisfaction when used in the field.

WILLIAM HOWARD, U. S. Civil Engineer.

Baltimore, May 1st, 1833.

To Messrs Ewin and Hearte—As you have asked me to give my opinion of the merits of those instruments of your manufacture which I have either used or examined, I cheerfully state that as far as my opportunities of my becoming aquainted with their qualities have gone, I have great reason to think well of the skill displayed in their construction. The neatness of their workmanship has been the subject of frequent remark by myself, and of the accuracy of their performance I have received satisfactory assurance from others, whose opinion I respect, and who have had them for a considerable time in use. The efforts you have made since your establishment in this city, to relieve us of the necessity of sending elsewhere for what we may want in our line, deserve the unqualified approbation and our warm encouragement. Wishing you all the success which your enterprize so well merits, I remain, yours, &c.

B. H. LATROBE,
Civil Engineer in the service of the Baltimore and Ohio Railroad Company.

A number of other letters are in our possesion and might be introduced, but are too lengthy. We should be happy to submit them, upon application, to any person desirous of perusing the same. m25